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1946-48

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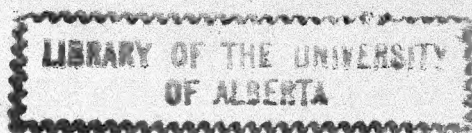
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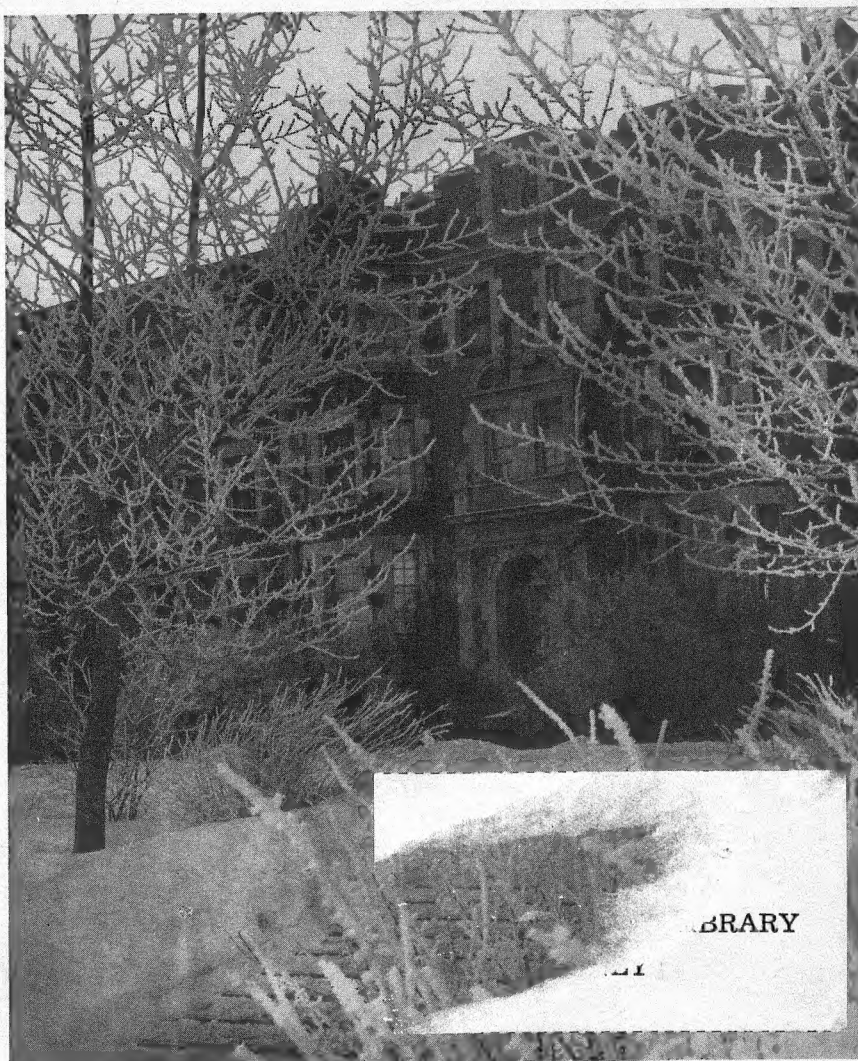
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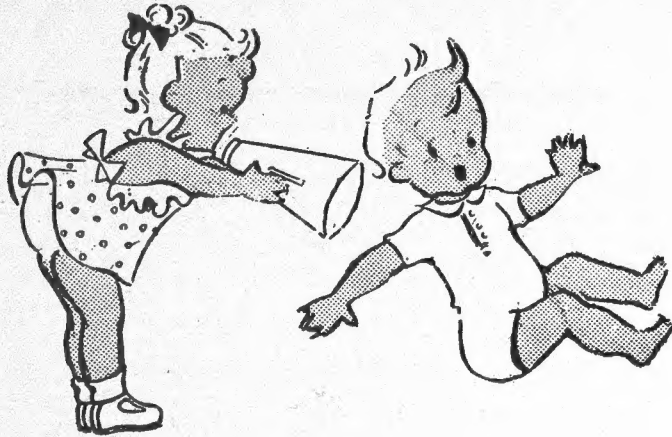
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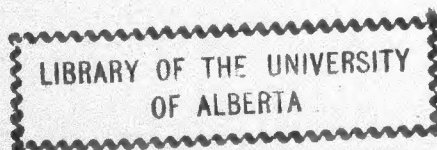
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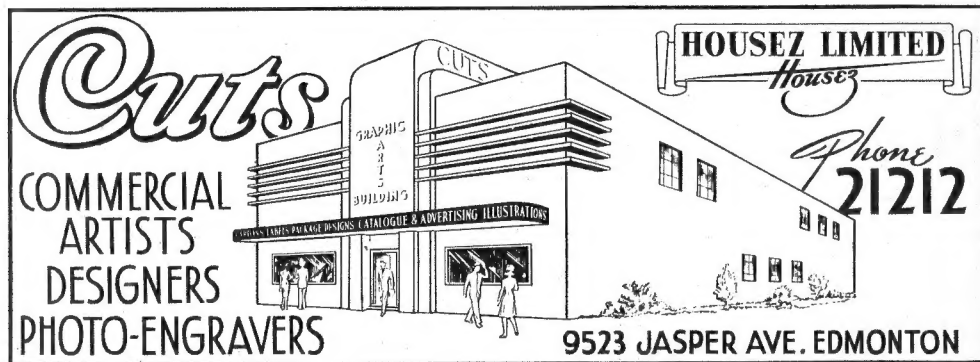


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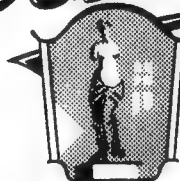
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Alberta Alumni and the Atomic Bomb

By Osman J. Walker

This article has two purposes in mind. The first is to present a brief description of the scientific developments that led up to the production of the atomic bomb, and the second is to show the contributions made to the programme by graduates of the University of Alberta. In this regard, the writer begs forgiveness for any error that may have been made and at the same time begs indulgence for omissions of names from the list of those mentioned. One must bear in mind that the atomic bomb project was the best kept secret of the present war and that details of all personnel associated with the problem have not been released.

Search for means to change one element into another of greater value was one of the driving forces of the scientists of the Middle Ages. These, as alchemists, worked in the service of their governments as assiduously as their counterparts do today but with no hope for success, as the secrets of nature had not been sufficiently disclosed to them to allow for such a discovery. It is admitted that they worked under great pressure—a promise of losing their heads if they failed to get results, so it is not strange that many of them deceived their employers by reporting successes that were never achieved. Many an alloy of copper and tin or copper and zinc was palmed off for gold on a debt-stricken overlord.

But Science marched steadily along making discovery after discovery. With each succeeding unlocking of the doors of knowledge, enthusiasm in the wonders so revealed, kept the researchers so engaged that for many years efforts to change elements into others fell very far in the background.

As so often happens, at the opportune time Nature disclosed to investigators that she had been concerned with transmutation and had been practising it from the beginning of time in connection with such naturally occurring elements as uranium and thorium. The veil was lifted in 1896 by Becquerel. There followed swiftly the discoveries of the Curies, Rutherford, and a host of other investigators who soon disclosed some of the secrets of radioactivity. In rapid succession came the discovery of radium and of the nature of the radiations given out by radioactive substances, the certainty that the emission of these radiations gave rise to other elements, the discovery of isotopes, and a sounder conception of the structure of matter. No longer could Dalton's Atomic Theory be considered tenable; it must perforce give way to a structure such as that ascribed to the atom by Bohr and Rutherford.

No longer could one look upon the atom as solid like a billiard ball with different material for each element, but must consider it more as a solar system containing at least three kinds of bodies present in different proportions—electrons, protons, and neutrons. The protons and neutrons making up the bulk of the mass of the atom are packed together in a nucleus, while the electrons of small mass revolve in orbits at some distance from the centre. These are the building blocks of all of the elements. Each electron carries a negative electrical charge of one unit while each proton carries a positive charge of one unit. But an atom is electrically neutral, so the number of protons in the nucleus of the atom must be equal to the number of electrons in orbits or shells. The number of protons in the nucleus is called the Atomic Number of the element. The proton and neutron each has a mass the same as that of the ordinary hydrogen atom while that of the electron is only about $1/1860$ of this. As neutrons have no charge, it does not make much difference how many of them are in the nucleus of an atom,

so with many of the elements there may be more neutrons in some of the atoms than in others without affecting the electrical character of the system. They add only to the atomic weight. For example, if we consider the element uranium, there are three kinds of atoms, the first with an atomic weight of 238, the second of 235, and the third with 234. Since there are 92 protons in an atom of uranium, the isotopes, as we call them, have 146, 143, and 142 neutrons respectively. The shells are the same, each containing 92 electrons, and the chemical properties are also the same.

Natural radioactivity is something that cannot be started nor stopped, accelerated nor slowed down. The transmutations take place steadily and follow definite routes, and it does not matter whether the element is free or in combination.

But scientists must go further in the search for knowledge, and new tools for doing so were developed from discoveries so far made in the field of radioactivity. Why couldn't some of these be used for artificially transmuting an element into a new element? Knowledge seemed to indicate that this might be done if one utilized some of the small particles now available such as alpha particles (positively charged helium nuclei given out by radioactive substances), protons, and neutrons. It would seem that transmutations would be brought about if these small bodies could penetrate the inner sphere of the atom, collide with the nucleus and either knock something out or be absorbed. As the volume of the nucleus is very small in comparison with the total volume of the atom, this would necessitate some good sharp-shooting and would be best brought about by rapidly moving streams of these particles. Alpha particles and neutrons are fast moving from their sources, so no difficulty is met with here, but in the case of protons it is necessary to make use of the cyclotron to sufficiently speed them up to allow them to penetrate the atom.

With these three kinds of rays much experimental work was done and many elements were transmuted into others, but the efficiency was extremely low because of the small percentage of collisions between the fast moving particles and the nuclei. This was especially so in the case of the positively charged alpha particles and protons which tended to be repelled by the positively charged nucleus and so generally veered away from a direct hit. The fast neutrons were not affected by the charge on the nucleus, and hit or missed according to the Law of Chance. It was thought that if the neutrons could be slowed down sufficiently they would still penetrate the inner sphere of the atom and would probably ease themselves into the nucleus of the atom and be absorbed. In some cases this would disturb the energy relationships within the nucleus, cause the emission of some part of it, and thus lead to transmutation.

This is an opportune time to consider the energy relationships within the atom. The electrons supply all of the energy of chemical reactions, such as when natural gas burns in air, but these energy values are relatively small when compared with the energy bound up in the nucleus. As long ago as 1905, Einstein formulated a Law which stated that one pound of anything when converted into energy yields 11,400,000,000 kilowatt hours, and since mass is mostly in the nucleus, this quantity represents nuclear energy. This energy can only be released in part by direct collision of, say, a neutron bullet with a nucleus.

In the period covering the twenty years from 1919 to 1939, advances in transmutation were steady but in no case was there observed any great release of energy although in many cases products were formed which were radioactive. In no case was the new element formed much different in mass from that of the parent.

Startling advances were achieved early in 1939 by observers working on the transmutation of uranium. They found that if uranium is bombarded with slow neutrons, fission takes place into two lighter atoms of similar atomic weight, possibly barium and krypton, and at the same time from one to three neutrons are released along with a tremendous amount of energy. As mentioned earlier, there are three isotopes of uranium but apparently the one that is exploded by the neutron is that having a mass of 235 of which ordinary uranium contains 0.7%, nearly all of the balance being U238. It has been calculated that one pound of U235 gives explosion products weighing 0.9990 pounds so 0.001 lb. of the mass has been converted into energy which according to Einstein's Law works out to 11,400,000 kilowatt hours of energy.

This discovery was rapidly confirmed in laboratories carrying on nuclear research in Great Britain, the United States, Germany, Russia, Denmark, and France, and the race was on for producing and controlling atomic energy whether for peace or for war. Research along these lines which had formerly been very much the private preserve of the physicist now must be shared by the chemist, the chemical engineer, and the design engineer.

It was quite certain to all that atomic energy could be used in war, and it was quite certain that the first nation to produce and use a missile utilizing atomic energy would be at a great advantage over all enemy nations. As a result, huge staffs were recruited, money was made available in large quantities, and the projects were given top priorities in men and materials.

Great Britain got off to a good start, but fear of invasion and the danger from bombardment led her to decide to transfer her efforts to the North American continent and along with Canada and the United States set up a joint board on the subject. In this co-operative enterprise, because of the necessity of keeping the operations a top secret, only a few knew what was going on; some made shrewd guesses, while others working on the projects had little inkling of what was happening.

In Canada, under the auspices of the National Research Council, the largest group of scientists were housed in the new buildings of the University of Montreal and here they worked side by side chemists, physicists, and engineers from Canada, the United States, Great Britain, France, Austria, Switzerland, and New Zealand. Smaller groups were at work in Ottawa and in other parts of the Dominion. An industrial plant for producing some of the ingredients of the atomic bomb was constructed at Chalk River, some miles north of Ottawa.

But the greatest concentration of effort was in the United States where research teams carried on experimental work in many universities and immense plants were built in the states of Tennessee and Washington for making ingredients for the atomic bomb, and a huge bomb testing field was constructed in New Mexico.

The efforts of the different teams were successful, the details for controlling atomic energy were worked out, the bomb was manufactured and tested, and the project was brought to a satisfactory conclusion by the devastating blasts in August, 1945, on the Japanese cities of Hiroshima and Nagasaki.

Canada entered the picture from several angles. The first of these was from the standpoint of raw materials. The largest deposit of uranium ore known is in the vicinity of Great Bear Lake, Northwest Territories, and had been mined by the Eldorado Gold Mines Limited. To preserve uranium for the United Nations, the Government of Canada took over this mine early in 1943 and at the same time intensified its search for new deposits of the

metal. J. W. Preboy '42 has worked continuously at the mine since he graduated.

Uranium salts are produced from these ores at the radium refinery at Port Hope, Ontario, and on its staff one finds R. H. Farmer, Sci. '34. The bulk of the uranium salts then are taken to Iowa State College where they are converted by a new process into the metal.

But the metal still consists of 99.3% of U238 and only 0.7% of U235. This is a great disadvantage, as U238 tends to absorb many of the neutrons produced by fission of U235. This means that there are not enough neutrons available to detonate more U235 atoms and allow the chain reaction to continue with the release of nuclear energy. The process will tend to come to a standstill. This is the situation with ordinary uranium. The desired effect could be obtained if one could concentrate the U235 by eliminating all or part of the U238. These have the same chemical properties but slightly different physical properties. One of the big tasks in the programme was to develop a method or methods for separating the two isotopes from one another on a commercial scale. Two schemes were used with success to get the separation desired, one of these by taking into account different rates of diffusion of the gaseous elements through a barrier and the other by an electromagnetic method. C. A. Johnson, Chem. Eng. '34, M.Sc. '36, worked on the diffusion method in the laboratories of Columbia University and shares in the patents granted on this phase of the problem. The following paragraph is part of a letter received by him from General Groves who was in charge of the American development:

"The War Department, the Manhattan Engineer District, and I personally, appreciate the contribution which you have made to the development of the atomic bomb. The research and development work on barriers for the diffusion process for the separation of uranium, in the S.A.M. Laboratories of Columbia University, was an essential factor in our success. Your skill and judgment in the field of science are beyond praise."

By these methods U235 was concentrated to the proper level for use in atomic bombs.

U235 represents one of the two explosives that may be used in the atomic bomb. The other one is plutonium, and undoubtedly a great deal of the effort in Canada was on this angle of the problem as was also that of the huge Hanford Engineering Works in eastern Washington. Quite a number of Albertans were engaged in the Canadian project either at Montreal, Ottawa, or Chalk River. Among these might be mentioned R. H. Betts, Hon. Chem. '42, M.Sc. '43; T. W. Boyer, Chem. Eng. '39, M.Sc. '41; P. E. Gishler, Sci. '29, M.Sc. '31; W. E. Grummitt, Sci. '39, M.Sc. '41; N. R. Legge, Hon. Chem. '42, M.Sc. '43; L. A. McLeod, Hon. Chem. '41, M.Sc. '42; S. N. Naldrett, Hon. Chem. '37, M.Sc. '38; W. S. Peterson, Chem. Eng. '42, M.Sc. '44; Ian D. Ritchie, M.Sc. '36; and P. J. Sereda, Chem. Eng. '43, M.Sc. '44.

The only Albertan known to have been engaged in the Hanford Works was R. H. Lee, Elect. '34.

No information has yet been disclosed as to the particular task in which these men were engaged, but it is quite certain that some were on physical and chemical research, while others were concerned with engineering design. The late Dr. Boomer was called in on occasion to give his assistance on certain engineering matters.

Plutonium is a new element of atomic number 94. It is prepared by the bombardment of U238 with slow neutrons from U235 which have been

slowed down by some moderator, such as graphite or heavy water. The Americans have used the carbon pile for this purpose, while the Canadian group has devoted quite a bit of effort towards the use of heavy water, part of which was produced at Trail, a plant in which F. J. Brooks, Sci. '40, was employed.

When a neutron enters the nucleus of a U238 atom, there is a change to U239. In turn, U239 loses an electron and goes to the new element, neptunium of atomic weight of 239. In turn neptunium loses an electron and goes to plutonium or element 94 with an atomic weight of 239. The extent to which U238 is converted into plutonium depends on the amount of U235 available, and at that only a small amount of plutonium can be formed as the degradation products of U235 slow down the reaction, the maximum yield being only a few grams per ton of original uranium. The uranium is now taken out of the converter, dissolved, and the plutonium separated by chemical means. The equipment for the production of plutonium is gigantic as it must be so designed that the immense amount of heat liberated in the fission of U235 must be removed by circulating water, and means must be taken to insure that the neutrons are sufficiently slowed down to continue the chain reaction involving the steady fission of U235 as well as the conversion of U238 into plutonium. Then there must be present retarders such as cadmium to prevent the reactions from getting out of hand and resulting in premature explosion.

Plutonium, like U235, undergoes fission with the release of much nuclear energy when detonated by slow neutrons.

The plutonium and U235 along with other necessary ingredients now go to the bomb experimental station at Los Alamos in New Mexico where the atomic bomb is assembled according to procedures previously worked out. Here there are many scientists engaged in research. Among them is D. K. Froman, Hon. Physics '26, M.Sc. '27. The assembling has to be such that there is no premature explosion. It has been established that if the amount of plutonium or U235 is over a critical mass, fission takes place spontaneously so that in the bomb the charge is in two parts each of less than the critical mass, but the sum being greater than the critical mass. These are kept apart, until one requires an explosion, by the mechanism in the bomb. At the proper time, the two objects come together and the explosion follows.

The war is over, but the work on atomic energy still goes on. Rumor has it that release of atomic energy is to be harnessed to peace time uses. It will probably be some time before the man on the street will benefit directly from this new advance in knowledge as there is a great deal of experimental work that needs to be accomplished in order to overcome dangers to the person by radioactive rays that accompany the liberation of this form of energy. Undoubtedly one benefit to man that will be the first to come will be the utilization of the radioactive material captured by such moderators as the carbon pile and the heavy water used in the production of plutonium. Here is a quantity of material that will have the same power in the treatment of cancer as have many grams of radium. It is hoped that further research will be along lines that are of benefit to men in peace rather than in war.



Camp 108, Yukon Territory, by H. G. Glyde



Construction Post, Whitehorse, by H. G. Glyde



Smart River, by A. Y. Jackson



Alaska Highway between Watson Lake and Nelson, by A. Y. Jackson

On Memorials

By R. F. SHANER

The other day Parliament approved a provision making contributions to a war memorial a charitable deduction from incomes. It is a safe bet that every one of us will be asked to contribute several times in the next few years. We will be called upon to make up our minds once more on an old problem—what is the best kind of memorial? How can we best honor those living and dead who brought us up from the depths of June 1940 to the summits of 1945?

Several important authorities have spoken already. The dominion government proposes to beautify Ottawa as a national memorial. The Alberta legislature passed a resolution favoring practical and useful memorials. A large number of private citizens are of the same opinion, to judge by the memorials that are proposed. Nearly all such projects are desirable in themselves, but whether they are adequate memorials is quite another matter.

Whatever else it may be, a memorial should be an enduring reminder of the spirit and deeds and example of our fighting men and women and a permanent witness of our gratitude to them. It should speak without an interpreter, a silent yet eloquent preceptor to us who have lived through desperate years, to those who are too young to remember, and those who are still to come.

What sort of memorial can accomplish these things? Before deciding, we might study the memorials of other wars, and note how they impress us.

Many of us must have taken a summer auto trip through the northern states. Beginning with Iowa and Minnesota, one will see in nearly every town an odd looking statue. The subject is everywhere the same, a soldier covered with a cape, wear-

ing a felt hat or a forage cap of the Napoleon III style and leaning upon a percussion cap musket. Sometimes it is a sailor, with the round ribboned cap we used to wear as children, and holding a ramrod, or leaning upon a smooth-bore cannon. Some monuments stand in the middle of the street, obstructing modern traffic to an annoying degree. Others are pushed aside on to an ill-kept green beside a public building or are tucked away in the town cemetery, mounting perpetual guard over graves marked with faded flags.

As artistic creations, not one of these monuments is worth a second glance. The best of them are commonplace and stereotyped in conception and mechanical in execution. Yet every one perfectly fulfills the purpose of those that raised it. The humblest and crudest statue preaches an unavoidable and unmistakable sermon. Every child knows that at one time his country underwent a great crisis, and fought the bitterest civil war of modern times. He knows that it was the fortitude of the common men and women that settled that crisis and did it so thoroughly that the questions involved will never be raised again.

Not all Civil War Memorials were useless monuments. There were practical men then as now, who insisted upon useful memorials and put up town halls, school buildings, public libraries, and watering troughs.

Most of such memorial buildings have long since disappeared. A town hall adequate for 1875 was worn out and outmoded by 1900. It had become a useless incumbrance on valuable land in the centre of a growing city. Public business required a new building and the memorial

disappeared. Who wants to send his children to a public school erected in 1880? A few memorial buildings have survived, and their history is instructive. There is a Memorial Hall at Harvard. One-half of it was used as a students' dining room. It is long since outgrown. The other half is a reproduction of Shakespeare's Globe Theatre, intended for occasional plays and as a Convocation Hall. The graduating class of today could not possibly crowd into it. Few students enter the building, and when they do there is nothing to remind them of the men and events it is supposed to commemorate. The building stands as a memorial to the architectural fashions of the 70's and 80's, of which the less said the better.

Of all the practical memorials, the humble watering trough was the best. Do not smile at a watering trough. There are some very beautiful ones in the world. A watering trough is durable, which is more than can be said of other practical memorials. But when horses disappeared, the same practical men who put up the watering trough complained about its obstructing traffic, and had it moved. A displaced water trough, high and dry and remote from the busy thoroughfare, is a melancholy object, better calculated to excite a smile of derision than a spirit of reverence.

If we think over these memorials of other days, we can formulate several general rules that may guide us in the selection of a memorial for the present war. In the first place it should plainly recall the memory of those to whom it is dedicated. A memorial that has to be explained is no memorial. Secondly, it should be durable enough to outlast the present. A memorial begins to be really useful about twenty years after it is erected. Last but not least, it should be something acceptable to the next generation.

Anything the children will ignore or ridicule is not a satisfactory memorial.

If we apply these rules, we can understand why the perfect memorial is something that is useless for any other purpose. The simple heap of earth over the heroes of Marathon, or the mound raised to Kosciuszko's memory at Cracow, Nelson's pillar in Trafalgar Square, Brock's monument at Queenston Heights, the stone cairns to pioneers in our own province: each is ideal for its purpose. They recall great men and great events. They engender respect and reverence in those who know, and a curiosity in those who do not. Such memorials last forever, and the older they grow the better they serve their purpose.

Now I realize that this is the council of perfection, and that a good case may be made out for a *useful* memorial. Every community has a need of many things that must be paid for by popular subscription, things which all agree are desirable, but which have not that emotional appeal that makes citizens open their pocket-books. It should be possible to compromise and create a worthy memorial that is also useful for other purposes.

Well, it is possible, but not so easy. Not every useful project can be combined with a memorial. An organ is a fairly satisfactory useful memorial, but a skating rink is not. A useful memorial should be considered very carefully for good taste and permanence. We should be very sure that the memorial is the chief feature and not a subterfuge.

I would like to offer an idea—a Dominion Memorial Day.

The American Memorial Day, May 30, has been a singularly happy and successful institution, a holiday that has kept the spirit of its original purpose much better than the Fourth of July or Thanksgiving. It was established in 1868 to honor the

dead of the Civil War. On each Memorial Day the veterans in blue assembled at the G.A.R. post and marched to the local cemeteries to decorate the graves of their comrades. As the last of the Civil War veterans passed on, the men of the First World War took their places, and now those of the Second World War will step in. Every grave of every soldier from 1776 onward is now marked and individually decorated every year.

Many other organizations now assist in this ambitious task. Gradually Memorial Day has become more than an exclusively patriotic celebration. It is now a day of innumerable private pilgrimages to the graves of relatives and friends. As the living tidy up the cemetery lot and place fresh flowers before each stone, they realize with Jeshua, son of Sirach, that,—

*"These were merciful men,
And their uprightness has not been forgotten.
With their descendants it will remain,
A good inheritance for their posterity.
Their descendants stand by the agreements,
And their children also for their sakes;
Their posterity will endure forever,*

*And their glory will not be blotted out.
Their bodies are buried in peace,
But their name lives to all generations."*

It is unlikely that the three Armistice Days of the two World Wars will be kept in equal regard. Already there are protests over the slighting of November the Eleventh. I doubt that any of the three will outlive our generation. All three are poor dates for holidays. November 11 is too late and May 8 too early for outdoor celebration in Canada. August 14 falls in the summer vacation period.

Would it not be better to establish a new Canadian Memorial Day some time late in Spring, when the leaves and flowers are just out and the weather is suitable for outdoor observance? Perhaps May 24 could be made over, or a day in June set aside as a new Canadian Memorial Day.

A properly observed Memorial Day is by far the best memorial. On that day everyone would individually do something to honor our dead. He could not help thinking about them, what they did and what they stood for, and what we should be and stand for,—which is the true object of any memorial.



A Visit to Dutch Underground Headquarters, Utrecht

By ROBERT B. LAYTON

It was a common looking house on one of the side streets. Our guide was just a young chap of about 19 years. The secret room was, as he told us, on the top floor. As we waited on the landing, he went to hide himself. There was a concealed door. We were to find it. Just as we decided it was time to go up, a door in front of us suddenly opened, and out of it stepped a nice looking blonde. The surprise took us a minute to recover ourselves. Part of the underground? "He is hid now," she said.

Above we found just an ordinary attic. Bits of junk, old bottles in older looking cupboards, plaster, broken furniture, pieces of rags, cobwebs, and dust. The search was on. All corners and nooks were explored. Somebody's "Here it is" ended the search. Part of the plastered wall was hinged as a door. It would not have been found if the post which blocks entry had been down in place on the inside.

If we had been the *Moffen*¹ several months back, our reception would have been different. On the table facing us would have been a Bren gun. To the right and left a Sten with full magazine. And on either side of the table chappies with hand grenades. A reception party of five was always on hand. And at least three spares. Visibly, all the members might be girls—the boys each had a wig and a girl's costume. Some, though, were girls. They, too, were part of the underground.

The place if you asked for it, was a "Hospital." During its early activity, the Germans had been around making inquiries. They had only found a *meisje*²

there. "What is this place?" they demanded. She had to think fast. "A hospital." From there on, a pretense had to be kept up. Each day a doctor drove up in his Red Cross car. It waited parked on the curb while he attended to his "duties" inside. Nurses in uniform could be found on call night and day. If the Jerries did come, there was an efficient alarm system. From the secret door, the boys could cross directly to a street front window to look down to see how many were there. In an emergency, from the secret room an exit led to the roof. Then a getaway could be made over the roofs. But first, all documents and papers would be destroyed.

And the phones would have been put out of commission. There were five. One went through to Ermelo after the latter fell into Canadian hands. The wire had been laid through the German lines into the Canadian area by one of the boys dressed as a nurse. The fellows at Utrecht waited anxiously for news of this venture. Eventually their phone rang. "OK boys. We're through!" Traffic over the line was terrific that day. People on the inside were wanting to know how their friends outside were, and vice versa. Not much military business had a chance. Plenty of that certainly followed later: details of German fortifications, troop concentrations, enemy food and ammunition dumps, and sundry bits of news valuable to the Allied Forces. Particulars on fortifications were often gathered from secretly taken photographs. One type of camera was worn as a wrist watch—small, compact, and inconspicuous. Another could be concealed in a hat. A wire led down to a pocket. From there the camera was operated. The mechanism was such that each time a picture was taken, the film

¹What the Dutch call the Germans. An expressive adjective accompanies that word.

²The Dutch word for mademoiselle.

was turned for another exposure. A wig, with long hair covering the neck, concealed the wire. The boys, dressed in Jerry uniforms, took many pictures. In and around Utrecht were (still are) eight or nine forts. Their specifications were all known to our armies.

Other phones were connected to Amsterdam and the Hague. Somehow they had phone connection to London. And another line to the Allies. On one occasion, Prince Bernhardt tried to put through a message, but with no success. Those who used the phones had a personal number which they had to give when ringing in. Each month a new number was taken. The Prince tried to make his call shortly after one of these changes. He could not get past the operator. She was right on the job. She knew most of the numbers. The Prince insisted that his was correct. "Oh no, boy. You can't fool me. You are just another Jerry." The Prince's number was that previously used by one of the underground who had been killed just a week before. The operator knew the number and the boy's fate.

Many of these fellows were boys—16, 17, 18. Of the five in our guide's section, he is the only one left. One of the boys was shot as two of them were swimming a river. They had been carrying information back and forth to our forces. He himself on another occasion had been shot at and wounded in Amersfoort. He took refuge in a hospital. Although the place was searched, they did not find him. He had been tucked in between two mattresses on one of the beds. Life was lived from day to day or hour to hour. A teacher friend in Zeist told me that his 'teen-age son there would leave home in the evening not to return until the early morning hours. During the war he didn't know where his son went or what he did. And he was glad he didn't. To say this life was risky is putting it mildly.

For those in this business, one type of protection necessary was paper protection. It was essential if they were to eat and to move in the open. Forms, cards, coupons: seventeen or more kinds of papers had to be carried — identity cards, distribution cards, coupons for food, clothing, papers to allow you to keep your bicycle (oh yeah?), to be on the street, to move to the next town, to work not for the Germans ("Ausweis"). At times we have complained about our army fighting a paper war. The Germans must have been masters at it. Many of these papers could be falsified, or if that was impossible, stocks could be stolen. In the room we were visiting, one whole wall was covered with samples of many of these papers. Some were genuine; others not. The latter, tributes to the skill of the Underground.

Identity cards were one of the major initial problem for new members. All males over seventeen were supposed to be in Germany. Those cards were impossible to get from the authorities. They had to be falsified. It was rather an involved process, this making of new ones. Because our guide's English was difficult to follow at times, as far as we were concerned, there were gaps in his explanation. For a while they stole the forms and filled in the details themselves. Later, however, Jerry smartened up and kept a record of the stolen numbers. This added a difficulty. Members would persuade elderly people to claim that they had lost their cards, and to request new ones from the authorities. They stood some chance of getting new ones. The old ones were turned over to the Underground. Experts skillfully stripped the outer layer off the inch or two on the top of the card where was printed the number, and transplanted it to a new blank card. Then the finger-print, photo, and other details were added. A special stamp-like frame was required around the photo. At times, when the underground

press could not produce these, a supply would be stolen. Later the authorities decided that a special stamp had to be affixed to all identity cards. When this difficulty was overcome, the authorities ordered numbers to be stamped on the stamps. Each village and town had its own number. The Underground printers likewise successfully handled this. And so it went on. Before Jerry had time to introduce some new idea on the identity cards, the Canadians were occupying the Netherlands.

Although the boys had their identity cards, they still had to eat. There were no rations for boys who were supposed to be in Germany. To maintain the supply of food coupons, frequent raids and hold-ups were necessary. Many offices had two policemen on guard at the front entrance. Sometimes one of these was in with the Underground. Sure, he'd put up resistance. He'd fire his pistol, but the rounds were blanks. One policeman was easier to look after than two. Others attended to the inside job. A Sten gun is good for a stick-up. On another occasion, a tree across the road blocking a car yielded a further good haul. As our guide told us, it sounds simple to tell. To carry through the plans is another matter. Some did not return from these exploits. One bank job yielded 200,000 gulden. A fund sufficient but for one month. Operations in the Underground were costly not only in lives, but also in money.

Falsification of so many papers and passes later forced the Germans in desperation to change their rubber stamps weekly. This added complications to the Underground, but did not stump them. It might be Tuesday or Wednesday or Thursday before their experts were able to make a duplicate copy. Success depended on many variables. The stamp was a two-inch circle inside which was the German eagle and the swastika, and usually

some printing of a few sentences or phrases. Weekly were made slight variations in design or in wording. One Monday morning the Utrecht Town Major ("Ortskommandant") found a more than unusual new weekly stamp. The eagle's head was replaced by Hitler's; the swastika by two crossed bones, under each wing a grinning skull. The script was such as to further increase his blood pressure. "The Germans who are about to die, greet you. Everybody is damned." This stamp was immediately withdrawn from use.

On another wall were samples of Underground newspapers. News was received not only from the radio, but also from news sheets dropped by the RAF. Some were mimeographed, typewritten, or printed. Our guide told us of one remarkable bit of workmanship performed by their printers. One evening the Germans placarded Utrecht with a notice bulletin ordering all Dutchmen of a certain age group to report to the central railway station next day for transport to Germany. Next day no one reported. The lengthy detailed preparation for this move had proved fruitless. The Jerry authorities in no end of an uproar demanded an investigation. They were getting nowhere until someone re-read the bulletins that had been posted. The Dutch type-men had labored all night long. They had set up and run off duplicate copies of that order. In the early hours of the morning other members of the organization, as soon as batches were made ready, placed the still wet Dutch printed bulletin over the German one. It was similar in all respects but for the date, which read one week later.

During the guide's narrative, for those who noticed it, there was another illustration of one of the conditions of the times. It is only a small thing; common, regardless of the social level. Our guide like the rest had been smoking. The stub, after he had pushed it out, was slipped back into

his pocket. The Dutch, like other Europeans during the war years, have had to be frugal with tobacco. They have had to economize in many things. It may look small on the map, but it is a long trek on foot from Rotterdam to Groningen. Many people covered those weary miles last winter in an effort to get food. Bicycles, hand carts, or large packs on the back carried these valuable supplies. At times the road was so black with travellers that the RAF, mistaking the moving columns for soldiers, swooped low to strafe. Only the vigorous were sure of completing the round trip. One youth, trudging along behind his hand cart, had not much farther to go to reach his home. Bags of food showed from under the tarp that helped keep off the rain. His cart was piled high. He was stopped, not by the Germans, but by his own countrymen. "You have more food here than you

need," they told him. They moved to help themselves. Yes, the cart had been piled high. When they pulled back the tarp, they stopped. There was the dead body of the lad's father. He had died on the journey back.

There was one more secret room in the house. It was for hiding in. Only four people could be accommodated. Our guide took us down to the floor below to show it to us. Entrance was made through the right side of the fireplace. You squeezed through to find yourself in a watercloset. The regular door had been built in and plastered over. Once this hiding place did have to be used.

This "Hospital" can now reveal its secrets. It is being made into a public show place: a memorial to the ingenuity and cleverness of the Dutch Underground.

ENTERPRISE EDUCATION

By MARGARET N. DAVIS

*"Our book is Lands Across the Sea—
May I take my wooden shoes to school?"*

*Land of Rembrandt and Ruysdael,
Land of turning windmills, of red and
yellow tulips,
Round red cheeses in the shops, spices
from Java,
Jolly skaters on the frozen canals.*

*Mud, slime,
Water to the waist,
Cattle floating bloated,
Starving people.*

*Sunny land of grapes and olives,
Raphael's paintings of gentle-eyed Ma-
donnas,
Venice, bride of the sea, and Pisa's Lean-
ing Tower,*

Rome where all roads lead.

*Winter—mud,
Summer—dust,
Snipers in the vineyards,
Death along the highway.*

*France: Paris—Chanel and Schiaparelli,
Arc de Triomphe and the Tuileries,
Orleans—The Maid on her white charger,
Liberte, Egalite, Fraternite.*

*Queues, black market,
Blank, dazed faces,
Lucille, shaven-headed
(Where is Laval?)*

*"Our book is Lands Across the Sea—
May I take my wooden shoes?"*

Culture in The Little Places

By R. A. Morton

Modern culture is essentially urban. Developments in the arts and industry originate and grow in the cities, and those outside of the immediate environs of the urban areas have to wait for a long time to feel the effects of these developments. For example, essential plumbing is a century old in the cities, but country people continue to do without. City dwellers have had the opportunity to enjoy the arts for centuries, but only recently have rural people begun to envy and covet that opportunity. Except for his implements devised, manufactured, and sold to him by urbanites, the farmer today is culturally not much further ahead than he was a hundred years ago. This "lag" is a brake on our country's cultural progress, and it is important that steps be taken to overcome it.

Now, while the societal structure of our country is in a state of flux, is a good time to do something about this situation. Although at the moment there appears to be a trend toward the city, the saturation point is near, and it is altogether likely that the future will see a trend away from the congested metropolitan areas, much of the population making its home in suburban communities. There seems to be a tendency at the same time for farm people to move their homes into villages or towns, and travel to and from their land when necessary. If this should take place generally, it will mean that rural people will be able to take advantage of modern conveniences, will have greater educational facilities, and will overcome the isolation which is driving so many people from the farms.

It seems reasonably certain that the cultural life of the people is being and will continue to be decentralized. Recreational facilities, opportunities for attending first class dramatic or musical performances, opportunities for taking part in these activities in a direct way—all of these and more will

be made available to rural people. The medium will be the community centre.

The community centre in rural areas is a comparatively recent development. It is true that most communities, even the smallest of them, have had their "halls," but the chief activity and almost the only one has been dancing supplemented by the Christmas concert once a year. The school building has served that function also in some places not without rather unhappy effects. But community centres in the fullest sense of the term, date from the years immediately following World War I; and only now, following another World War, is anything definite and direct being done to develop them to the fullest degree.

While it is a comparatively simple matter for a city to provide artistic facilities and such cultural necessities as public libraries, rural people face many difficulties in providing similar services. Isolation, distance, the immobility of farm people, lack of funds, and lack of leadership are all handicaps. But the establishment of centres is not impossible, and a number of examples of successful small community centres could be given. Because the writer is most closely connected with the project at Sangudo, near Edmonton, the experience of the community centre at that point will be related.

Sangudo may be described as two hundred and fifty people living on the top of a hill. Appropriately enough, the church and the high school occupy the highest ground, and the other establishments of lesser importance are grouped further down the slope. Most people who live in the village have an expansive and beautiful view of the Pembina valley, which probably explains something of the success of the community centre. In the valley and on the land adjacent to it are farms producing grain, clover seed, honey, and hogs, farms which are of

about average productivity. The village itself is progressive enough. We have electric lights which waver at times, but add to our comfort nevertheless. The stores are good, and prices are reasonable. The district paper is printed here, the school division office is located in the village, and besides, if we desire to see Edmonton, a bus runs every day and the train four times a week.

The community centre started with a citizens' organization about a year and a half ago. The organization began with an idea and an executive, and that is about all. One of the first lessons we learned was that we must start something and start it immediately. So, between May and July, 1944, we had a motion picture business under way and the nucleus of a library begun. Tennis was revived that summer, and the centre helped sponsor the skating rink the following winter. Now, 19 months after the centre was formed, we own the village hall and sound-motion picture equipment; we own six hundred volumes or more in the library; we rent space for library and club rooms; we continue to sponsor tennis and the skating rink as well as a summer sports day, dances, socials, and so forth. Affiliated with the centre are cultural groups such as the Arts and Crafts Club, the Girls' Choir, the Hobby Fair Committee, the 'teens club, and a dramatics group. All these activities contribute to and draw from the central treasury under the firm but genial control of the bank accountant, our treasurer. Moving pictures and dances provide more revenue than they consume, compensating for the deficit of the other groups which do not pay for themselves.

Accomplishments should not be evaluated only in terms of material wealth. No digits or dollar signs can measure the keen enjoyment of those who look forward to the moving pictures each week-end. What could some of us give in exchange for the real delight we have in creating something on canvas in oils? Crafts are flourishing in the wider community because of the

incentive in the annual Hobby Fair. It took time for the library to become an accepted part of the community, but an active committee and an enthusiastic Book Club have at last made the project worth-while and vital. When parents think of the satisfaction the skating rink has given to hundreds of young skaters and a score or more hockey players, they realize that a strong community organization makes it possible.

The labor involved is decentralized as much as possible, and practically all of it is voluntary. In the motion picture enterprise alone, a dozen or more share responsibility. The hardware merchant and a teacher are the projectionists; the bank accountant, the bank manager, the station agent, and sometimes the district agriculturalist sell admission tickets; two of the section men or a creamery employee take turns in collecting tickets at the door; high school girls do the ushering, and a selection committee of five or six others chooses the pictures to be shown. The moving spirits behind the art club are the bank manager, the divisional school secretary, and a clerk in one of the general stores. So the list could be expanded.

Here is an example of culture brought to one of Alberta's little places. Its success has depended upon several important factors. First, the centre was organized to meet a need. At the start a questionnaire was circulated and answered by about eighty persons. From the data compiled, the executive embarked upon a few enterprises which had received indications of popular support so that some fruit could be borne immediately. After a few projects had been successfully launched, others were added to the list, more and more people were asked to assume responsibility, and as a consequence interest grew in the possibilities of the organization.

Another factor contributing to the success of the centre is that it is administered by an organization independent from any other in the village. It is bound to no creed or party, it has

no sponsoring society but itself, its membership is open to the entire community. Some activities are sponsored directly by the centre, others by clubs affiliated to the central organization. Anyone who wishes to organize a cultural club consistent with the purposes of the centre may do so and affiliate with the core group.

There is much more that could be told about the Centre at Sangudo, but enough has been related to illustrate the possibilities of bringing culture to the little places by this means.

Man has a great capacity for destruction. A cathedral which has involved the creative efforts of hundreds of workmen for hundreds of years can be reduced to rubble in a hundredth part of a minute. Indeed, a city of cathedrals can be atomized in a

second. Creative processes are inevitably and always slow, while destruction is terribly rapid. If civilization is to flourish or even survive, man's capacity for destruction must be curbed so that his complementary instinct of self-expression may live and grow. Everything that can be done, must be done to enable people, the little people of the earth who live in the little places, to find opportunities to create—to develop their individuality. Community centres, particularly those in rural localities, will have an important part to play in releasing the creative potentialities of great numbers of people. Whether these forces of constructive self-expression will dominate over the tendencies leading toward destruction is a question for the future to decide.

CONTINUITY

By R. H. BLACKBURN

*Little boy with sunlight hair,
Little boy,
Solemn-eyed, knowing-eyed:
Try my words, scale my chair,
Scare me with a Viking shout!*

*Little boy with careful step,
Down what track,
Trail of bear, wagon trail,
What long furrow, field or sea,
Half remembering, have you come?*

*Little boy with outstretched arms,
Laughing boy,
Take my hand—mine the need!
I the husk, the single straw,
You the immortal seed.*

The \$20,000,000.00 Horticultural Industry in Alberta

By J. S. Shoemaker

Horticulture is one of the divisions of Alberta's agriculture in which conspicuous progress has been made in recent years. Its value is now estimated at \$20,000,000.00, which represents a large increase in the last ten years. Also, when one considers all phases, it is true that there are more persons in Alberta growing horticultural plants of some sort than there are growing wheat or raising livestock.

The commercial vegetable canning industry in Alberta, particularly in the Taber-Barnwell and Lethbridge districts in the southern part of the province, has made great strides since a modest beginning in 1934 to about 8,000 acres in 1945. Large quantities of peas (5,000 acres), sweet corn (1,600 acres), beans (800 acres), pumpkin (100 acres), carrots, cabbage, turnips, beets, and certain other vegetables, e.g., pickling crops, are canned commercially each year. At a conservative price **for the grower** of slightly slightly more than \$100 per acre, the commercial canning crops represent a value per year \$1,000,000.00. Also, when these crops are processed and distributed through the trade, a large sum of money and various investments are involved which react to the welfare of persons both within and outside the province.

Alberta is a part of the world's chief centre of garden pea seed production in an area which extends westward into British Columbia and southward into the United States. Approximately 15,000 acres of peas are grown for seed purposes in Alberta. Pea seed production alone represents a value for the growers of about \$1,000,000.00. Other vegetables grown in quantity in Alberta for seed production include beans, beets, carrots, onions, turnips, rutabagas, radish, and parsnip. Table mustard seed (not the wild kind) grown on 20,000 acres in southern Alberta returns \$200,000 to the growers. Considering seed production, in all veg-

etables, the value of this industry in Alberta in 1945 is estimated at 1½ million dollars for the grower. During the war years the University played an important part in maintaining a high quality of vegetable seed in Canada. Alberta has become "world-famous" for the production of the seed of certain flowers, e.g., double petunias.

A wide range of vegetables is grown in quantity in a commercial way in Edmonton, Calgary, and other large centres, and in southern Alberta. The total acreage for commercial market garden and truck crops is estimated at 2,000 acres with a value for the growers of \$300,000 (a conservative \$150 per acre).

The 3,000 to 4,000 vacant lots rented by the Edmonton Horticultural Society, for garden purposes only, represent in the aggregate a total of about 500 acres. At least another 500 acres are cultivated by persons in the city around homes in which they live. Thus, in the Edmonton district alone at least the equivalent of 1,000 acres are used for home or family gardens. At a rough estimate of \$100 per acre, these give a value of \$100,000 though little of this produce is actually sold. A portion of the crop is canned in the home, which is a factor adding to the total value. Figures similar to those presented for the Edmonton district, or another total of \$100,000, may be assigned to Calgary. Certainly a third \$100,000 for centres such as Red Deer, Stettler, Lacombe, etc., would not be an excessive estimate.

There are approximately 100,000 occupied farms in Alberta. An estimate of \$25 to \$50 per garden multiplied by 100,000 farms gives a total of \$2,500,000 to \$5,000,000.

A conservative estimate of the number of gladiolus corms or "bulbs" planted in 1945 in the Edmonton district is 250,000. An equal number is estimated for Calgary and Lethbridge,

respectively, and along with other cities and towns the number of corms planted annually in the province easily reaches the million mark. A considerable sum of money is involved for the corms, but the return through the portion sold as propagated corms or as flowers is unknown. This winter, 17 new varieties of gladiolus originated at the University of Alberta are being named and introduced.

Roses and various other flowers in great variety are planted in large quantity each year. The writer cannot estimate even closely a value for outdoor flowers grown in Alberta, but the interest is keen and large.

A nursery industry which has developed in the province has played an important part in making available a supply of various kinds of plants adapted to climatic conditions here. This has been a noteworthy advance because only a few years ago there were few real nurserymen in the province, and most of those operating as such were, for the chief part, dealers. That is, they would import young stock, often from Holland, grow it for a few years to larger sizes and then sell it. Nurserymen probably sell more than \$75,000 worth of plants a year in Alberta and, now that the war is over, are expecting more business than ever.

It is difficult to place a cash value on trees and shrubs used for ornamental plantings, windbreaks, and shelterbelts, but such a value is unquestionably significant and appreciable. Perhaps five to ten percent of the value of the house would be a reasonable figure to use in thousands of cases as an estimate for properties that have been planted with ornamentals, lawns, etc. No attempt is made to include forestry in this report, but a large value is involved and is probably more closely related to horticulture than it is to any other branch of agriculture.

Though Alberta does not produce the varieties of tree fruits usually handled in commercial channels, it does lay claim to the production of a wide range of fruits in the hardier

sorts. The fact should be borne in mind that profits can easily be as great from crabapples in this region as from apples, peaches, etc., in the recognized commercial regions elsewhere. There is, as yet, no need in the prairie provinces for the expensive spray programmes of the older districts. With crabapples selling at about five cents a pound, and comparatively close spacing of the trees, it is possible to net a nice return per acre.

About thirty tons of tree fruits have been produced in a year at the Provincial Horticultural Station, Brooks. From the small orchard at the University of Alberta, eight tons of fruits have been harvested in a year. Private individuals have established fair sized orchards in various parts of the province, and a number of such orchards have reached commercial proportions. The Provincial Horticultural Station at Brooks now has in operation a total of sixty-seven demonstration orchards throughout the province.

There are a number of very good red raspberry plantings in the province which compare favourably in size and in yield and quality of crop with those in the recognized commercial districts. About seventy-five acres are used for the commercial production of red raspberries in the Edmonton district. One grower produces this crop on thirty acres, and this ranks as one of the largest plantings in Canada.

Strawberries are also grown in widespread places in the province in a commercial way. A recent development in Southern Alberta is the production of strawberry plants for planting in British Columbia.

Wild blueberries are harvested and sold in large quantities, and on several occasions the matter of a commercial cannery for this crop in Alberta has been discussed. Among other cultivated fruits are the plum, sandcherry, plum-sandcherry hybrids, apricots, currants, gooseberries, and Manchou (Nanking) cherries. Among the wild fruits, besides blueberries, are the saskatoon, cranberry, chokecherry, and highbush cranberry.

A conservative estimate of the value of the fruits harvested in Alberta is \$500,000.00 a year.

The commercial production of potatoes in Alberta, in 1944, amounted to 2,497,000 cwt. At an average price (ceiling) of \$1.72, the value becomes \$4,294,840.00. If production of potatoes other than for commercial purposes is considered, the figures for this crop will be about doubled.

Alberta ranks first among the prairie provinces, and third in the dominion, in greenhouse investment, with a value of about \$1,000,000.00. There are about thirty acres "under glass" in Alberta, and in greenhouse work the production value per square foot is very high. The sale of greenhouse-grown cut flowers amounts to about \$200,000.00. Further, many greenhouse men operate nurseries and

other projects which should rightfully be added to the value of crops actually grown under glass. New carnation seedlings developed in breeding work at the University seem destined to become leading commercial varieties for the greenhouse industry.

That "man shall not live by bread alone" is fundamental. Unfortunately, the chief object of horticulture has much too often been considered to be the production of "pretty flowers." The medical profession traces back to a "barber ancestry." Horticulture has made advances, too, and its contributions have added greatly to the wealth of Canada and Alberta and to a more enjoyable life on the part of a high percentage of the population. Surely, too, horticulture is one of the branches of agriculture that will enlarge in importance in future years in Alberta.



U. P. Day--September 26, 1945

By R. L. RUTHERFORD '19

*Till Birnam Wood do come to Dunsinane,
And poplars have returned to dust again.*

On September 26, 1945, the last of the stately poplars in front of the Arts Building succumbed to the axman's blow. The attack on these campus adornments started in reality about a year ago. This attack did not reveal the ultimate objective since, at first, only those well surrounded by shrubbery were removed, but gradually and periodically these poplars were cut down until at last they are all gone. For a time it looked as though the row in front of the Arts Building would be spared since alternate ones were removed some months ago:

*But no, alas, in turn they all have had
to go
Before their leaves had fallen to the
ground below.*

To a third-storey dweller whose room faces east, they will be missed indeed.

*Trees planted in the days of Tory
Each decade reached a higher story.
They waxed when left alone to grow in
glory
But waned beneath the pruning hook in
fury.*

After watching the annual work of pruners on the campus and elsewhere within the city, I am convinced that their ancestors must have been tonsorial artists or atavistically similar to and possessing the alleged proclivities of George Washington as a boy.

Somewhere about 1909 the first street boulevarding was carried on in Edmonton

on 107th Street. Some of us as youths thought we might live to see the day when these trees would arch across and meet like those in eastern cities, but no, they have not been allowed such splendor. They must be cut and pruned to stumps.

These poplars are blamed for everything. Their roots allegedly plug sewers and drainage, even blocks away according to some. In spring their fluff annoys the asthmatic and the allegedly allergic:

*I did not know when they were tender
That trees as such did have a gender,
Could be selected as to sex—
Male, fluffless poplars will not vex.*

It appears, however, that only females were planted in the row in front of the Arts Building. Perhaps small female saplings, like those of the human species, are more gracefully designed than their male counterparts, hence attracted the eye of the landscape artist of the day.

One of this row was of particular interest, namely that to the north of the centre driveway (now closed off). This one always came out in leaf a few days later than the rest and likewise retained its foliage a little longer than the others, irrespective of the seasonal variations in time of budding and leafing. It was like some other females—they are a little late in coming to blossom but remain in bloom longer.

But exodontia has been performed on the last root. They are gone, and nothing but filled-in craters take their place. They

NOTE: The writer apologizes for contributing twice to the same number of *The New Trail*. The first was a request performance; this is a proffered one. The next will be a command performance and thus, "Once more I come to pluck your berries unrestrained."

may not have been the most attractive type of trees, but they were trees. Ecologically we are located in a Parkland Belt, but soon we will be back to bald prairie.

*The canines scampering o'er the lawn
in glee
Are not distracted by a poplar tree.
Now dandelions will thrive where once
the roots did grow
And spread their fluff across the lawn
like snow.*

These trees will be missed as the perch of birds, especially the winter varieties, which to me are more attractive than those of summer. Where will the large flocks of Bohemian waxwings sit when they make their first call on me this fall? I am afraid I shall not see them or hear their unharmonious chatter. I can still get the same impression, however, by listening in from a distance to the confused sounds of a Faculty Women's Club tea, two floors below.

Periodic visits from the noisy bluejays on a cold morning will be missed, and the most attractive of all winter birds, the pine grosbeak, will have to sit and sing at some place where I cannot see him.

I suppose the larger plan for general beautification of the campus made it necessary that these trees should go, but I always had hopes that the one row in front of the Arts Building would be spared. Even though they were not specially beautiful, they were trees and had grown to somewhat mature dimensions.

If there are ever others in their place, it will have to be another generation that will enjoy them. My impression of the architectural design of the Arts Building is that it appears more gracious when viewed from a distance through trees. It is not a streamlined creation that would be fitting to the bald and bleak prairie.

And now you say, "Has Rutherford become so eccentric that he moans the passing of trees and talks about birds, when in his youth he used to belittle dear old Wordsworth and his poems pertaining to these?" Perhaps so, since with time we all become emotionally mature, some later than others.

*I still like trees howe'er unsightly they
may be.
My antecedents dwelt in them preceding
me,
Slept peacefully while swaying to and
fro,
Protected from the beasts that roamed
below.*

* * * * *

*Now campus brush is spread around the
lawn,
To save grass roots and seeds of weeds
that spawn,
To stop the wayward youths who make
their paths anon
In bee-line fashion to the Tuck and
beyond.*

Yea, Birnam Wood hath come to Dun-
sinane.



THE NEW TRAIL

A Quarterly Report of Campus Activities

An official publication of the University of Alberta and its Alumni Association. Any person interested in the University may subscribe at the rate of one dollar a year.

Editor: F. M. Salter

Associate Editor: G. B. Taylor. *Art Editor:* H. G. Glyde

Business Manager: Clem L. King

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Editorial

EDUCATION FOR AN ATOMIC AGE

The bomb that dropped on Hiroshima perhaps missed its proper target. Not that anyone can regret the earlier ending of the Pacific War, if the bomb really achieved that result, although we may feel that we descended low to end it. The bomb obliterated: it respected neither age nor infancy nor sex. We lost with that bomb any feeling that **our** hands were clean. It is a heavy price to pay for the curtailment of war, for the saving of splendid American and Canadian soldiers, airmen, and sailors—against such a saving, who can estimate the cost! Against such a cost, who can estimate the saving.

We may at least consider other targets. If the next bombs drop on power politics, secret diplomacy, virulent nationalism, and ruthless exploitation of backward peoples, we shall be content. If they do not, we shall revert to the beast in any case, and the Hiroshima bomb is a fit introduction to the new barbarism. It is true that Einstein estimates that the world could carry on in "civilized" fashion with two thirds of its population vaporized, but he perhaps intends a scientific selection of the exact two thirds to be favored.

And somewhere in our Roman holiday, let us drop a bomb on Education. It must be the most obvious of all things that mediaeval education will not serve an Atomic Age. In the time of Chaucer, life expectancy at birth was twenty-five years. It is now sixty years. The educational period sufficient for men whose lives averaged twenty-five years will not do for those who average sixty. Further, if the Atomic Age means anything, it means a partial lifting of the curse of Adam: "In the sweat of thy face shalt thou eat bread." It means, eventually if not soon, more power, less labor, greater productivity, and abundant leisure. All that most universities can now claim is that they train men and women; they do not educate. The training is valuable only for workaday lives, not for leisure.

Even if Education fitly served our present needs, our conception of it must change; we may no longer educate Canadians, Americans, Russians, but the children of one world. Mackenzie King has preached the necessity of World Government. We cannot have world government without world citizens;

indeed, before we have a large number of people capable of world citizenship, we shall not have world government.

The solution may be easier to state than to effect. We can no longer get along in our universities without strengthening the centre. We must no longer permit Arts and Science to serve merely as the screening agency for the training faculties. We must add brilliance and distinction to the centre and increase the term. At the present moment, we grant the B.A. and B.Sc. degrees to students who present three-year programs that add up to nothing more meaningful than delirium or fantasy. Do what we will, we cannot, when confronted by the bewildering diversity and immensity of modern knowledge, construct a three-year plan that means anything more than a registrar's nightmare. Yet man must learn, or perish.

Just here we may commend the Board of Governors for planting in the University a seedling Department of Fine Arts. We shall need in the future, if not a single world speech, as many international languages as possible. Science is such an international language, a language of knowledge and the brain, but the arts are the language of the heart. If we are to become fellow-citizens of the men of Russia and Siam, of France and Germany and Switzerland, of Japan and Indonesia and Brazil and Peru, we shall need to cultivate the arts, for it is only in and through them that we understand our brothers. Black or white or yellow or red, our brothers speak to us in their handiwork, show us their griefs and joys and aspirations, and remind us of our common earth. In the Atomic Age, if the quickened clod does not become a star, an angel, we may as well prepare Hell quickly and be done with it.

F. M. S.

WAR MEMORIALS

Dr. Shaner's article grows out of the discussion of possible war memorials that has taken space in **The Gateway** during the autumn. A committee has been set up by the Board of Governors to consider this matter. Dr. Shaner's suggestion is very much to the point.

We may indicate two limitations: first, his plan is a national one, and does not solve the local problem. Second, the moving and beautiful American "Decoration Day" would have been impossible if, in the first place, the war dead had been buried in China, Burma, Egypt, North Africa, Italy, France, Germany, and the seven seas.

Clear thinking and impersonal honesty, always obligatory, become sacred obligations when such a duty as the creation of a memorial lies before us. And it must first of all be plain, as Dr. Shaner points out, that a memorial is intended to remind us. If it reminds us, it serves its purpose; if it does not, it fails. From this point of view, the Memorial Organ was a mistake. Between the ranged and ornamental pipes we have had draughting laboratories, dances, leg-shows, and even the vulgarities of Med. Night with no sense of indecorum. Could we have endured any such cheapness within equal distance of the poorest cenotaph in the land? Hardly. Indeed, had our organ been widely felt to have any memorial aura, any sacred presence, we should have had more than a sparse handful at the last Memorial Day service. Of the thousands who have been taught to love music and enjoyed it from our organ, not one in a hundred has ever been consciously aware that the organ was placed there to remind us of the mud and stench and poppies of Flanders fields and the wholesome Canadian flesh there buried. The memorial organ, in short, is a lie. No doubt a white lie, an unconscious one, or even a handsome one to many of those who canvassed for it, but a lie nevertheless.

So it will be with every "practical" memorial. A practical memorial is a contradiction in terms. A memorial is not, and cannot be, a practical thing. It is a string around the finger. It can be used for no other purpose than to remind us; and it is good or bad in the degree to which it serves that one purpose. When we attempt compromise, we become more or less dishonest and selfish. Indeed, the very word **compromise** suggests dishonesty: let us not, when we create a new memorial, compromise ourselves and the dead.

If the dead can be compromised. We certainly cannot appeal to their desires. "They would not want a useless cenotaph." Of course not. They wanted no memorial of any kind; it is we who, knowing our human frailty and our pre-occupation with that world that is too much with us, take, in building a memorial, a sacred vow to remember. Nor may we even examine too narrowly or too individually what they died for. Some died rather than remain forever on hopeless "relief"—bitter and short was their pilgrimage. For only too many of Canada's dead the most fitting memorial would be the representation of a box-car or a hobo jungle with the graven vow, "It shall not happen again." Or have we already forgotten these things? Some sought death in a spirit of reckless adventure. Some felt the glamor of a uniform or wanted the approval of girls. Some saw through a glass darkly that Nazism and Fascism were evil things and must be destroyed. Do their individual motives matter when the mere fact is that the foundations of the new world are cemented with their bones? It may even be that comparatively few of them saw clearly the imperative issues for which they fought or could trace to the seeds of defeat in 1776 and 1798 the dreadful flowering of Hitler's counter-revolution; but we who do know these things—upon us rests the obligation neither to forget nor to permit others to dwell ignorant how much blood is needed to establish and maintain the simplest and commonest of the rights of man. Whatever they died for, or thought they died for, they enabled us to breathe.

A very interesting proposal for a specific memorial is that of a Chair of Peace. It would be our first endowed Professorship. The proposal has a great deal in its favor, though it might be subject to obsolescence; but it seems impractical. That is, the occupant of the Chair ought to be a more distinguished person than any at present on the campus. How large a salary would be necessary? To bring an annual yield of three thousand dollars, we would need an investment of one hundred thousand at a safe three per cent. But would three thousand secure the brilliance we need? Six thousand might, perhaps nine thousand would. The proponents of the Chair actually estimate an annual expenditure of ten thousand dollars. Are we prepared, then, to seek an endowment of more than three hundred thousand dollars? It is of course possible that some of the great Peace foundations might help.

Professor Jones has suggested not a Chair of Peace but annual Peace lectures. For a thousand or fifteen hundred dollars distinguished persons might be invited to the campus for a week or two, and add greatly to our cultural life.

Civilian students seem to favor a gymnasium—and nobody can deny that we need one. It is true that with the RCAF drill hall now available, we are better off for playing space than ever before, but it seems shameful not to provide for our student body something better than makeshift facilities for the games and play and health that are the birthright of all young folk. Returned men seem to favor scholarships for the children of those who served in the war. The exact nature of these scholarships is not yet fixed. If they were limited to the children of men and women who died or were disabled, and if they did not involve a trust fund going on century after century into absurdity, these scholarships would seem noble. But is either of these

practical schemes really disinterested; will they serve to remind us, to remind us all, and only to remind us? There is no other test of the appropriateness of a memorial.

The practical spirit dies hard, however, if indeed it dies at all. Nevertheless it is true, true yesterday, today, and forever, that we do **not** live by bread alone. The Union Jack has had more influence on more lives than any known discovery of science or any known creation of engineering skill. And what is the Union Jack? A symbol, a rag, a colored design crudely splashed on the cheapest cotton. By symbols we live—all life, that is, above the level of the beast. There is the iron ring of the engineer, the scholar's gown, the oath of Hippocrates, the unlocked door of the Northland and the fire laid, the uniform of the Mounty, the blue nose, and the maple leaf—and beyond all these, the babe and the cross. And on our campus, as the Editor has learned to his grief, there is not one single symbol to hold our graduates together, so that even **The New Trail** has to be endowed by the Board of Governors. Is it not time in this western world that we learned the age-old lesson of civilization: that the practical in the end defeats itself, and only the spirit of man avails against the dark. Better a poplar cross or a painted boulder, if we can afford no more, than magnificence and splendor devoted to non-memorial uses and subject, as Dr. Shaner has shown, to obsolescence. Better no memorial at all than a lie.

Indeed, if it comes to that, the true memorials of our dead will last a while yet, and give us time to deal justly, for they are hearts chiselled deep with individual grief or heavy with the weight of all this unintelligible world.

F. M. S.

The Editor Says:

Once more our nerves twitch and chills attack our spine and feet as we break with precedent and our four-year past in an effort to make **The New Trail** worth a dollar a year. We know perfectly well that to the many who have made **The New Trail** possible, it does not have to be worth a dollar a year, it does not have to be worth anything. Nevertheless, we feel the obligation. Some day—some day!—some future editor will proudly feel that **The New Trail** of his time does indeed fitly and fully represent the University and the soil from which it springs; for the present, we can only do, as the French would say it, our possible. But one's possible in Alberta is partly a gambler's throw, with a liberal reckoning on the luck of tomorrow.

We have long desired to increase the size of the print. It was not only the reader's comfort that was in our mind the proof-reader's eyes must struggle a few years yet with Freshman

essays! We felt that we could not use a larger type without a larger page—and there is the whole story of the new **New Trail** in a nutshell.

Now a typographical note. Long since, with our hearty approval, the Print Shop ordered new type; and Mrs. Donnan and Alf Hartwig and George Campbell have pleased us to the core by reserving it for first use in **The New Trail**. The body of our little quarterly is now set up in Kabel ten point and eight point. We think this is a beautiful font, swiftly readable—and easy to proof-read! There are absolutely no serifs or cross-strokes or curlicues or ginger-bread in the letters, but just the clear, naked shape. Black-face is available in this font; for italic we resort to the Cloister font that we have always used, but with twelve point now available as in R. L. Rutherford's "V.P. Day." Cloister has a small type on the standard slug; it is agreeable in showing a comparative abundance of white paper between the lines, but

twelve point Cloister is hardly larger than ten point Kabel.

The editor must again express his gratitude to the printers. Their patience and their interest, their willingness and enthusiasm are heart-warming indeed; it is their experience and skill that are responsible for the "shining morning face" of **The New Trail**. And we have taken it hard that at the very time when we were dressing up this fractious child in a new suit of clothes, the Editor had to come down with the flu! These words are being written in a horrible fog amid a litter of paper handkerchiefs, and we cannot remember three seconds together what is in this issue! But we know we can depend on Mrs. Donnan and Alf and George to make it all look like something.

Well, let us have a look at Volume IV, Number 1, and see what it offers. We have managed somehow to hash out a couple of editorials. And since one of them deals with a mildly controversial issue, we feel that it is unfair to imply that it expresses the opinion of the editorial board. Our editorials can never be written in committee, for there is never time. For this reason we shall in future sign them and hope that they will receive no more weight than should be accorded to one man's views.

At this present, we have no hope of being able to get the Chipmunk column done; if it is done, it will be brief. We regret also to omit Trail Blazers, but the serious illness of Mr. Ottewell and the consequently doubled duties of Mr. Taylor have obliged us to omit that feature. Mr. Taylor deserves our special thanks for getting Alumni Notes done.

We have placed O. J. Walker's splendid explanation of the atomic bomb and the part played in its preparation by Alberta boys in the front room of this issue. Needless to say, under O.J. himself, as Professor of Chemistry, many of these boys received their training. This subject is so important that we plan an Atomic issue in the spring, an issue which

would contemplate from several points of view the new age on whose doorstep we shiver.

R. F. Shaner has a flat, downright manner that never fails to inspire a brotherly warmth in the Editor. Here he is: an you like it, so! An you like it not, so! This is not to accuse him of prejudice; he has a broad, open, inquiring mind. But the world is so full of fuzzy thinking and windy verbiage that we do love a man who can say plainly what he means and no bones about it. Yet a bone or two might have been expected from an anatomist!

R. L. Rutherford is a living proof that poets die **young!** He has said with great good humor, but not without a cutting edge, what many on the campus have felt about the ruthless destruction of the poplars. How we have managed to overlook the talents of R.L. before, we cannot tell; we hasten to make amends by appointing him Jester in Ordinary (and Extraordinary too) to **The New Trail**. For a further taste of the Rutherfordian style, we recommend his review of an important contribution to basic knowledge of Alberta, under Books of Our Own.

Books of Our Own presents its largest budget to date with three good books.

Mrs Mudiman is rarer than a day in June, indeed that rarest of all things, a faithful alumna. Her memories of Pembina will, we hope, stir nostalgia in many a former brave of the Wauneitas.

We are grateful to Bob Layton (Captain, CAEVAS) for his account of a Dutch Underground cell. It brings home conditions under German occupation as few things we have read have done.

R. A. Morton, Principal of Sangudo High School, is modest, as his story of the Sangudo Community Centre proves. We print this article in full confidence that it will kindle similar enterprises elsewhere.

Dr. Shoemaker, Professor of Horticulture, is one of the more voluminous

writers of the campus. More than a thousand students in the armed forces have taken his correspondence course in horticulture offered through the Canadian Legion Educational Services. His valuation of Alberta's horticultural crops astonishes us. In this development, the University and Dr. Shoemaker himself have played no pygmy part

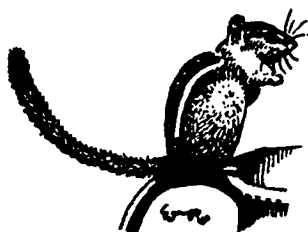
We have long desired to introduce our Art Editor, Mr. H. G. Glyde, properly, but with quarterly publication it is not easy to avoid sins of omission. At any rate, here he is, and in good company, that of Mr. A. Y. Jackson. They were permitted by the Canadian Government, or commissioned, to look with the eyes of artists at the Alaska

Highway, and their work has since been widely exhibited. We are indebted to **Canadian Art** for the cuts of these pictures [facing pp. 10-11] which were published in that journal in March, 1944. We are happy to print also specimens of the work that is inspired by these artists at Banff. The latter, facing pp. 42, 43, are a part of the harvest of the Summer School of 1945.

Finally, a note about the poets. R. H. Blackburn graduated into the Air Force in 1942. He is now in the Calgary Public Library. Margaret Nancy Davis, after several years in Naval Intelligence, has returned to finish her course in Honors English. There is quality in both of them.

F. M. S.





the chipmunk

Through the autumn and early winter the most important question in the University has been: What to do with January registrants. The buildings are now filled to capacity, laboratory periods have been shortened and multiplied, the University occupies the old University High School building as well as the Normal School, now the Education Building, and there is no more space available anywhere. For a time it was planned to build a ninety thousand dollar shack to hold about a thousand students at a sitting, but even this could not have been in use before April. The residence problem has also been crucial.

It is now proposed [This bulletin comes to you on Christmas Eve by the courtesy of Santa Claus] to perform a Caesarian operation on the University and set up the bantling at the former U.S. Airport. A most helpful attendant physician at this operation has been W/C L. H. Phinney, Acting Special Commissioner for Defence Projects in Northwest Canada. It is proposed that the January students live at the airport and take lectures there; where necessary, instructors, and possibly a few students, will taxi back and forth. It will be readily understood that to start from scratch, and now, to provide all that is necessary for eight hundred students within a few weeks will be no picnic.

On the campus meantime, Assiniboia and Athabaska will increase their accommodations by means of double-decker beds. It is regrettable that the residences must be thus overcrowded, and study conditions will deteriorate; but the students in residence have been willing to co-operate in the emergency.

The quality of the returned men is excellent. Instructors are pleased. There is an earnestness and a workmanlike attitude in evidence in all classes that is inspiring indeed to that other, and unsung, group of heroes, the instructional staff that has carried on short-handed and over-burdened for many years and that must now continue [How long, O Lord, how long!] to fight the still un-ended war. Perhaps the Editor may be forgiven for choosing a near example: to read a set of freshman essays from a class of thirty to thirty-five students, the established normal and optimum number in a class in all North American universities, will occupy a full, long, day, a day of ten or twelve hours. These essays will average more than a thousand words in length, and the set comes to half the length of an ordinary novel. But they cannot be read as swiftly and thoughtlessly as one reads a novel. Every paragraph, sometimes every sentence, will call for comment and correction. Explanations must be written, so that the reader himself normally writes many thousands of words while reading a set of essays. It is a chore, simply, and there is no easy or swift way of getting through it. But when classes are increased to seventy-five and a hundred, all the zest and fun go out of it. It takes nothing but sheer brute courage even to look at a set of essays, and the spirit quails before them. Under these conditions, the University cannot claim to teach Freshmen: it weeds them out. That is all. That is all we have been doing for years. That is all we are doing now. That is all we can do until classes are reduced to a humane number. But with the present registration and without considering

January registrants, to reduce classes to reasonable size would require more classrooms and at least two more full-time instructors in English. Multiply this sort of difficulty through all the departments of the University, and it will be understood why it is that the improved quality and greater maturity of students, with the large admixture of returned men and women, is the only thing that enables instructors to put any heart into their work.

* * * *

The first post-war Rhodes Scholar from the University will be John C. Dougan who left his studies in Honors History in 1942 to take the King's shilling. During the war he rose from Private to Major in the Loyal Edmonton Regiment, and won the Military Cross and bar. A second Rhodes scholar will be Victor E. Graham who forsook his studies some years ago for Naval Intelligence. The IODE scholarship of 1945-46 has been granted to J. E. Gander '45, who serves this year as an instructor in English at the University. The campus feels that it will be well represented at Oxford and at Cambridge.

* * * *

We regret to announce the death on December 22 of Miss Jessie Brown. She and Teenie Miller retired in the spring of 1944 when members of the Faculty gave them a "party" and gifts. In Jessie, Dr. Tory made one of his finest choices of personnel, and she served this University with a kindness and fidelity that endeared her to generation after generation of students and staff. In the earliest days of the campus, when there was neither Arts Building nor Medical, and when classrooms and offices and dormitories sheltered under a single roof, it was Jessie and other members of the "sub-staff," as much as anyone else—if not more—who gave this University that set of the spine and that friendly spirit that are still its distinguishing marks. And let it be recorded also that in days before there was a High Level bridge, Jessie and the other girls when they went to town on their afternoons off, would come trudging back along the high wooden sidewalks of those

days, and doing many a "lang Scots mile," loaded down with fresh vegetables and special delicacies for students and staff in residence. Their holidays were, to them, only opportunities for further service and further kindness—and they no doubt lashed out at the market many a penny that might have brought comfort in their age. The death of Jessie will catch at the heart of many and many a student and instructor of those older days; with her, we know, something bright and pure and sterling has passed away from this earth, and we feel our own day perceptibly draw in and darken toward the end.

* * * *

It is announced from London that the 1851 Science Research Scholarships, discontinued in 1939, will be offered in 1946. These are post-graduate scholarships designed to assist students who have "given evidence of capacity for scientific investigation." They are tenable for two years, and their value is £350. Ordinarily, candidates must be under 26 years old, but a student beyond that age by reason of war service will not be eliminated. Further information may be had from Mr. G. B. Taylor, Assistant Registrar.

* * * *

The efforts of the Students Council and **The Gateway** to tie in the University of Alberta at Calgary with the parent institution have been more successful than those of **The New Trail**. We have not been remiss, but our labors have been crowned with failure.

The Philosophical Society also makes us sin with envy. Mr. Alexander Calhoun of the Calgary Public Library was the first speaker from the south to address both the mother society and the daughter; he spoke here on November 14.

* * * *

This is a feeble representation of autumn news, but with red flannel around his neck and his feet in a mustard bath, the chipmunk feels despondent. His tail drooped long ago, but now even his perky whiskers have wilted.

Edward Herbert Boomer

All who read this will have heard of the great loss recently suffered by the University, our country, and the scientific world at large. Dr. E. H. Boomer, Professor of Chemical Engineering, died while asleep early Saturday morning, October 27th.

Dr. Boomer was one of the first graduates (1920) in Chemical Engineering of the University of British Columbia. He pursued graduate work at McGill University and was a Ramsey Memorial Fellow at Cambridge University in England. Leaving Cambridge he returned to Canada (1925) to accept an appointment in the Department of Chemistry at the University of Alberta. Here he served as Lecturer, Assistant Professor, and Associate Professor of Physical Chemistry. In 1943 he was made Professor of Chemistry and Chemical Engineering. Dr. Boomer held offices in the Canadian Institute of Chemistry and the newly formed Chemical Institute of Canada; he was a Member of the Association of Professional Engineers of Alberta and a Fellow of the Royal Society of Canada.

Dr. Boomer was particularly active in research. His special interests were in the fields of high pressure reactions, natural gas, hydrogenation, and liquid-vapour equilibrium in hydrocarbon systems. He was the author of many technical papers and articles related to this work. During the war, working closely with the Department of National Defence, he directed several war research problems. Dr. Boomer served in the capacity of technical consultant to many industrial organizations, both public and private. His frequent appearance as technical adviser on the witness stand is further evidence of both his technical abilities and the regard in which he was held. In the past few years, in addition to his teaching, consulting, and research work, he was active as Western Representative of the Allied War Supplies Corporation and later as Chairman of the Petroleum and Natural Gas Conservation Board of Alberta and Commissioner of the Natural Gas Utilities Board. In his capacity as Professor of Chemical Engineering, he was an advocate of and untiring worker for expansion of the Department.

It is unfortunate that many graduates of the University never had the opportunity of meeting Dr. Boomer. His teaching brought him in contact only with senior students, and then only with students of Chemical Engineering, Chemistry, and Electrical Engineering. Those who took Chem. 60, Chem. 65, Chem. 103, or Chem 107 will always remember him. Strangely enough, the inspiration Dr. Boomer gave to his students did not come from his lecturing as such, for he was not an outstanding lecturer. It came from the fact that everyone who had contact with him soon came to know him as an inspired scientist, a cultured gentleman, and a dependable and kindly friend. Students who were fortunate enough to know Dr. Boomer in the intimacy of the research lab will remember this as one of the finest experiences of their college life. To watch such a man work, and to work with him, was an education in itself. Who can forget the man who would drop into the lab at eleven o'clock at night or ten o'clock Sunday morning just to "chew the fat," make a suggestion or two, and leave a previously exhausted or discouraged researcher quite prepared to tackle anything!

To his friends and colleagues Dr. Boomer was known and highly respected as a man of unusual intellectual honesty. A champion of the "scientific method," Dr. Boomer gave far more than lip service to this code; it was part of him. For these reasons, and because of his personal charm, Dr. Boomer found himself acting as personal counsellor to many of his friends. The advice he gave was always most carefully thought out and was highly valued. News of his death brought telegrams of condolence from a wide circle of friends all over Canada. "Deeply grieved at the loss of my dear friend," was the tone of them all.

I know of no better way to illustrate the trust and confidence which he enjoyed than to cite a recent interview between a busy company executive and a young graduate seeking employment. After a few preliminary words the executive asked, "Well ———, you say you're a Chemical Engineering graduate from the University of Alberta?" "Yes, sir," replied the graduate. "Did you take classes under Boomer?" "Yes, sir, I took Chem 103 under Dr. Boomer," came the timid reply. "Fine, you're my man. Start the first of the month."

Despite his genius as an engineer and scientist, Dr. Boomer took great pleasure in ordinary recreational activities, hunting and golfing being his favorite sports, and photography his favorite hobby. Even such a simple thing as "matching for coffee" was not beneath him. In fact, his colleagues will long remember his boyish delight in "sticking them for the bill." In books he was widely read.

Ed Boomer was a scientist, a scholar, a gentleman, and an all round good fellow. His passing truly constitutes an irreparable loss to the University. In his loss former students, other friends, and his colleagues have lost part of their own lives.

G. W. G.

University Honor Roll

These are they whom we delight to honor

AWARDS

Victoria Cross

Lieutenant Robert Hampton "Hammy" Gray, RCNVR, Arts 1937, November, 1945.

Distinguished Service Cross

Lieutenant Robert Hampton "Hammy" Gray, RCNVR, Arts 1937. 1945

Military Cross

Major Douglas John Burke, RCA, Applied Science 1934-1938.

Lieutenant William Bentley Tobey, RCE, B.Sc.(M) 1941. November, 1945.

Bar to the Distinguished Flying Cross

Squadron Leader William Fraser Edwards, RCAF, D F C , B.A 1942. October, 1945.

Distinguished Service Order

Captain Leonard Vincent McGurran, RCA, B Com. 1939.

Major William Allan Milroy, RCA, Commerce 1938-1940. November, 1945.

Commander of the Order of the British Empire

Brigadier William Smith Ziegler, D S.O , Applied Science 1935-1939: September, 1945.

Member of the Order of the British Empire

A/Major Thomas Alfred Gander, RCAMC, M.D. 1940. September, 1945.

Mentioned in Dispatches

Captain Jack Wilfred Bailey, RCE, B Sc (Chem) 1941. October, 1945

Captain Robert Edward Bell, RCAMC, M D. 1942. October, 1945.

Flying Officer Robert Douglas Dunlop, RCAF, Applied Science 1940-1942. December, 1945.

Captain Andrew Welsh Lees, RCE, B.Sc (Chem) 1938 1945

Captain Alexander Havelock MacLennan, RCAMC, B.Sc (A) 1928, M D. 1932. October, 1945.

LAC Harlin Kenneth Newinger, RCAF, B Com. 1939. June, 1945.

Captain William Alexander Reed, RCAMC, Medicine 1934-1938. September, 1945.

Brigadier Ernest Brown Wilson, O.B E , E.D , B A. 1925, LL B. 1927. September, 1945.

Legion of Merit Medal

Chief Warrant Officer John Milton Brown, USAAF, B A. 1937. 1945

CASUALTIES

Killed

Major Alex Addington Ballachey, jr , RCA, LL B 1935. August, 1944.

Flying Officer Kenneth Gordon Fenske, RCAF, Applied Science 1940-1943

Pilot Officer Thomas Rex Forsyth, RCAF, Arts 1939. April, 1944.

Lieutenant Robert Hampton "Hammy" Gray, RCNVR, Arts 1937-1938. August, 1945.

Paymaster John Lloyd Lewis, RCNVR, B Com 1936 October, 1944

Lieutenant Thomas Wilson MacKenzie, RCA, B Sc (A), 1942. 1945.

Previous Reported Missing Now Presumed Dead

Flight Lieutenant William Wood Lindsay Brown, RCAF, Arts 1938.

Flying Officer Vincent Bernard Fleming, RCAF, Applied Science 1941: October, 1945.

Flight Lieutenant Hugh Munro Hope, RCAF, B A 1941: February, 1945

Flying Officer John Hurlburt, RCAF, Arts 1940-1942

Flight Lieutenant Earl Clifford Ireland, RCAF, Arts 1939-1941: 1945.

Pilot Officer Harry Charles Irvine, RCAF, Arts 1937-1941: 1945.

Pilot Officer William Anton Semeniuk, RCAF, B Sc (Ag) 1936, M.Sc. 1938, Ph D 1944: 1945.

Flight Lieutenant Douglas Haig Sharpe, RCAF, B Com. 1938: December, 1945.

Pilot Officer William Alexander Walkinshaw, RCAF, Commerce 1937-1939.

Presumed to Have Died While a Prisoner of War

Lieutenant William Anderson Millar, RCE, B.Sc.(M) 1938: December, 1945.

Previously Reported Missing, Now Safe

Flying Officer Edward J C Krysko, RCAF, Arts 1937-1938: May, 1945.

ENLISTMENTS

The War Records Committee is grateful to those readers who have been good enough to furnish information for the Honor Roll. In order to make our final records complete and accurate, the Committee renews its request for assistance and particularly hopes that service

men and women and their next-of-kin will report additions and corrections to the Assistant Registrar, University of Alberta.

The following names have been added to the Honor Roll since October, 1945; the persons mentioned had been serving for some time previously.

Army
 Corley, John Bryson (RCAMC)
 DuMont, Mark Aurele (CDC)
 Garfield, Nettie Carline (RCAMC)
 Halford, T. G.
 Hislop, Frederick "Rick" Charles
 Patterson, Clyde Rodier
 Pow, Cyrus Graham (RCAMC)
 Roe, Maurice
 Stanford, Margaret (CWAC)
 Tomaszewsky, Edward Emil (RCAMC)

Air Force
 Coffin, Eric Russell (M R. College)
 Comfort, John Benjamin
 Elves, Kenneth Jarrett
 Finn, Francis Cleary
 Green, Frederick Syas Walter
 Harbison, Irene Dorothy (WD)
 Huse, Per Osborne
 Mason, Robert George
 Richardson, L. A.

U.S. Army
 Brown, John Milton
 Corday (Cohen), Theodore

Navy
 Irving, Adele Margaret (WRCNS)

FRIENDS OF THE UNIVERSITY

Financial Report for the period December 16, 1944, to December 18, 1945

Balance unappropriated as at December 16, 1944	\$ 429.80
Subscriptions and special gifts received, December 16, 1944, to December 18, 1945	4,640.04
	<u>\$5,069.84</u>

Appropriated as follows:

Special gifts, as designated by Donors:

Burns & Co., Ltd., grant for research in the Department of Animal Science	\$ 500.00
The Gas Company Undergraduate Scholarships	1,200.00
Friends of the University bursaries in Dentistry	50.00
Dr. R. B. Sandin's Cancer Research	50.00
Contribution to the expenses of exchange students traveling to Connecticut Teachers College	100.00

	<u>\$1,900.00</u>
Balance available for appropriation as at December 18, 1945	<u>\$3,169.84</u>

New Friends: E. G. Cullwick, J. Erlanger, Major A. M. Johnson, W. R. M. Mason, R. Molloy, J. G. McDonnell, Mrs. O. Wooding.

Number of active Friends as at December 16, 1944	122
Number of active Friends as at December 18, 1945	141
Total subscriptions for the period January 1, 1944, to December 16, 1944	\$2,820.22
Total subscriptions for the period December 16, 1944, to December 16, 1945	4,640.04

It has been found impossible to hold the annual meeting of the Executive Committee during December. The Executive will appropriate further amounts for scholarships and research in January, and the details will be reported in the April scholarships and research in January, and the details will be reported in April.

C. L. KING.

Books of Our Own

Robert E. Gard, **Johnny Chinook**: Tall tales and true from the Canadian west. (Longmans, Green and Company, 1945. \$3 50.)

Johnny Chinook is truly a "book of our own," for Mr. Gard gathered the material for this collection of stories about Alberta and her people while he was in the province as Director of the University's Alberta Folklore and Local History Project, a project sponsored by the Rockefeller Foundation. Mr. Gard has now left Alberta for Wisconsin, but **Johnny Chinook** is a material monument to the work he did for the stimulation of interest in Alberta past and present. The word "present" is used advisedly, for although the tales that are told here deal chiefly with things past, the author makes it plain that they are such a natural product of Alberta's air and spirit that new tales must constantly be in the making.

There is in Canada today a new sense of the cultural value of regionalism. The concept of Canada is too vast to grasp without a firm rooting of the interpreter in an understanding of and affection for the region he knows best, whether it be the Annapolis valley, the Eastern Townships, western Ontario, or the foothill country of southern Alberta. Such regionalism is not provincialism but rather an antidote to that which has been Canada's besetting sin. Regionalism seeks a cultural rather than a political expression, it is a positive rather than a negative force, and, unlike provincialism, is wholly consistent with a healthy national and international outlook.

Towards the development of such a regionalism in the Canadian west, **Johnny Chinook** points the way. Here are some of the best tales that Alberta people have told and to which they have listened since childhood. They are set down by a man evidently skilled in listening and equally skilful in telling. There are, as the writer suggests, many differing and possibly better versions of these anecdotes, and undoubtedly there are many more worth recording, but most readers will agree that Mr. Gard has been happy in his selection and that his book gives a picture of Alberta unique in its quality of intimacy.

At the beginning of our rambles with "Johnny Chinook," who, Mr. Gard tells us, is the "convenient figment" who told him all the tales here set down, we find ourselves, very appropriately, with Mrs. McCorquodale and Charlie Clark in the office of the *High River Times*, one of the most Albertan, and certainly the most widely quoted, of Alberta's weekly newspapers. In High River we hear Senator Dan Riley's story of the lost Lemon Mine. When the Senator mentioned Nigger John Ware, this reviewer was sorry that Johnny Chinook said nothing of that character's exploits, for Nigger John was such a famous person in his time that the present owners of his property still cherish part of an old packing-case bearing the superbly simple address—John Ware, Northwest Territory. From High River Johnny Chinook takes us south along the old Macleod Trail

to hear stories of Mounted Police days and the Indian legends collected by Chief Mike Mountain Horse of the Blood tribe. Mr. Gard did not neglect the north where he found an equally rich store of tales of early days in Edmonton, of the Barr colonists at Lloydminster, and of that "man of the good heart," Father Lacombe. In the Peace River country he discovered the fantastic humor of the north, with its rich delight in grotesque exaggeration and calculated understatement. Everywhere he encountered tales of Bob Edwards, Alberta's unique newspaperman, and he reproduces the epic of Edwards' encounter with Lord Strathcona and some of the letters Edwards composed, ostensibly written by the remittance men to whose exploits southern Alberta owes many of its best anecdotes.

The story Zack Hamilton told Mr. Gard about Fred Stimson's visit to Windsor Castle will remind a good many people in Calgary and the foothill country of the experience of another well-known oldtimer, who was brought up in the vicinity of the same royal residence. Surprised one day by the approach of the royal carriage as he was bathing in the forbidden waters of the Park, this resourceful character, unable to retreat, simply added himself to a convenient group of statuary. The Queen, noticing the new ornament to her Park, had the carriage stopped in order to admire the group more closely. All would have been well, the narrator used to say, had not the Princess Beatrice given the show away. "Why, Mother," she said, "it's Malcom."

Mr. Gard is probably fully aware of the tendency of Alberta raconteurs to adapt to their own circumstances the experiences of others, but it seems reasonably certain that in the lobby of the Palliser, in the beer-parlour of Calgary's Royal Hotel, in the High River Club, and in various other places where two or three are often gathered together, there will be some hot disputes as to the authenticity of some of Mr. Gard's attributions. I have not been able to find anyone who could verify his account of the way in which the students of the University opened Edmonton's high level bridge in 1912, but more circumstantial tales have been told, with less foundation, of the strange behaviour of the University population.

Johnny Chinook is an attractive production, pleasantly printed and illustrated with line drawings by Walter Phillips, R.C.A., to whom incidentally, no attribution is made except on the jacket. But they are signed, and admirers of this artist's work will enjoy them. There are one or two minor slips in the text. "Due to," appearing as a preposition on page 164, will render one sentence completely nonsensical to the purist who insists on regarding that phrase as by no means identical with "owing to." Not all members of the

Royal Canadian Mounted Police are "officers" in the sense in which that word is used by the force. The story called "Fate's Fickle Fortune," based on "A Hatchet Mark in Duplicate"—a better title, perhaps—has a singularly unsatisfying ending, for Mr. Gard leaves us suspended at the point of discovery that the girl with the hatchet mark is about to marry her half-brother.

These are small faults to find in a book that is highly successful in conveying the

peculiar flavour of Alberta, its daring, its invincible optimism, its kindness, and its note of fantasy. **Johnny Chinook** is more than a collection of tall tales and humorous anecdotes. Told as they are by a writer with a talent for this kind of story-telling, their sum is more than the total of the parts, and **Johnny Chinook** becomes a portrait of Alberta that may encourage some of its readers to seek literary riches in the same Eldorado.

L. G. THOMAS.

Tomkins, Stuart Ramsay, **Alaska, Promyshlennik and Sourdough** (XIV+350 pp., illus Norman. University of Oklahoma Press, 1945. \$3.00.)

Dr. Tompkins, the author of **Russia through the Ages; from the Scythians to the Soviets**, utilizing Russian as well as American and other sources, has produced in this new work an admirably conceived and executed history of Alaska. Since it is a mistake, as Dr. Tompkins points out, "to assume that Alaska's history began with the gold rush of 1898," he has clearly traced the development of exploration in the North Pacific and written what in reality is a history of Russian expansion eastward. For many readers this will be the most novel and attractive feature of the book. In the second part, slightly less than half the work, the author traces the history of Alaska from the United States purchase in 1867 down to the building of the Alaska Highway.

After a brief sketch of the Russian advance into Siberia, beginning with the Stroganov family's penetration of the valley of the Kama leading up to the Urals in the 16th century and ending with the occupation of the Kamchatka Peninsula at the close of the 17th century, the author proceeds to describe in detail Russian exploration of the Northern Pacific. Was Siberia connected by land with North America? was a question Peter the Great at the close of his life sought to answer, and for that purpose commissioned Vitus Bering, a Danish sailor, to explore the North Pacific to discover if a passage existed between the two continents. Peter was unaware of the exploit of Semyon Deshnev who, in 1648, had sailed down the Kolyma River to the Arctic and thence around the extreme promontory of Asia, East Cape or Cape Deshnev, to be driven ashore south of the Anadyr River which empties into Bering Sea. Deshnev's account of this achievement reached St. Petersburg only some eighty years later. It seems surprising that Dr. Tompkins has not mentioned this exploit, though he seems to take it for granted when he says that the Russians "passed from the Arctic coast to the borders of the Bering Sea seemingly oblivious to the fact that they had rounded the tip of the continent." Bering, of course ignorant of Deshnev's voyage, in 1728 set sail from Kamchatka and steering to the North East reached the latitude 67°18', which took him through the strait that bears his name, though he seems to have been unaware at the time that he had passed between the two continents.

Some years later, commissioned by the Russian government and the Academy of

Sciences, Bering after great difficulties and years spent in preparation, in 1771 embarked for Kamchatka, crossed the Northern Pacific south of the Aleutians, which he thus discovered, and skirted the coast of Alaska and Kodiak Island. On his return Bering was wrecked on the island off Kamchatka that bears his name where he died of scurvy.

The survivors of Bering's crew had brought back many pelts, among which was the sea otter which commanded a high price in Chinese markets, and thus whetted the appetite of merchants, adventurers, and sailors alike. Bering's voyage was therefore the prelude to a series of further expeditions, in part exploratory but in the main in quest of furs. The initiative came largely from Siberian merchants, "hard and perhaps none too scrupulous bargainers, given at times to sharp practice, but also open-handed adventurers . . ." "Second only in importance to these were the **promyshlenniki**, the Russian counterpart of the **coureurs de bois** of North America—the hard-living, hard-drinking but robust sons of the forest, whose calling was the pursuit of the peltries of sable, marten, ermine, and beaver and otter for the markets of China and Europe. Accustomed to the rugged life of their trade in Siberia, the **promyshlenniki** cheerfully exchanged the dog sled and the river boat for means of transport suited to the sea . . . They dared these uncharted and unknown waters, they learned the treacherous currents and tide rips and reefs that lie in wait for the unwary mariner. They plotted by trial and error. Ignorant and unskilful, yet they succeeded where even the most experienced and cautious might well have failed."

It was these "Buccaneers of the Pacific" who explored and named the Aleutians, subdued and laid under tribute of **yassak** their inhabitants, and reaped fabulous rewards in priceless furs, thus extending Russian dominion across the Northern Pacific. The two decades from 1770 to 1790 constituted the heyday of the individual merchant and fur trader. At the close of the period came the powerful merchant such as Ivan Golikov of Kursk and Gregory Shelekhov of Rylysk, who sought to push their activities to the coast of Alaska, but perceived that such a venture would be profitable only if they could secure a monopoly to exclude the small Russian trader as well as the Spanish and English who in the meantime had become

interested in the west coast of North America Shelekhov accordingly approached the Russian government, but was unsuccessful until he began "to advance as the chief concern of the company the conversion of the natives to Christianity and their instruction in the arts of civilization" and paid court to the Holy Synod, trying to induce them "to undertake this praiseworthy work and indirectly to contribute to the expansion of Russian power." Ultimately successful, the big interests combined to form the "Russian American Company," which at the close of 1798 was given a monopoly of the fur trade, and all the small fur traders were obliged to withdraw.

The new company secured as its main factor the capable, indefatigable, and astute Alexander Baranov, a merchant of Kargopol, whose business reverses had led him to enter the service of Shelekhov. Establishing his headquarters first on Kodiak Island, on the Gulf of Alaska, and later, when the supply of furs to be reached from that base was depleted, in 1799, at Sitka on what is now Baranov Island on Alexander Archipelago, Baranov sought to reap the harvest of furs to be had on the North West coast of America. In order to exclude the foreign trader, especially the English and Americans, as they never succeeded in doing, Russia was obliged to extend her sovereignty over the entire area and, after a good deal of dispute, south to 54°40'.

By the middle of the 19th century the fortunes of the "Russian American Company" had begun to wane. Some of the Company's employees in St. Petersburg had been implicated in the Decembrist Revolt of 1825, a fact that drew from Tsar Nicholas the scornful remark: "A fine company you have got together there!" Moreover the Hudson's Bay Company under Sir George Simpson proved to be a formidable rival of the Russian Company. Even more serious was the inability of the Russians adequately to protect their interests at so remote a distance from their capital, especially during the Crimean War. It is no wonder that by the late fifties the idea of disposing of the Russian American

colonies was in the air. The Russian government preferred to concentrate on expansion in Asia, particularly in the Amur River basin, rather than in America. Besides, with the accession of Alexander II the Russian American Company came under fire from the liberals. "On the one hand it had been criticized by adherents of the old order because an institution that enjoyed partial exemption from the state's authority was an anomaly in an autocracy, while, on the other, as a monopoly it challenged the principle of nineteenth century *laissez faire*, now coming into favor in Russia." United States business men too were anxious to obtain the interests of the Russian Company on the west coast. But shortly after negotiations for sale began, the United States was in the throes of Civil War, so that it was not until after the conclusion of that struggle that they were taken up once more. Finally in the spring of 1867 Alaska was sold to the United States for \$7,200,000. Great Britain had been kept entirely in the dark and felt aggrieved that the Russian government had not given her or the government of Canada an opportunity to purchase the territory, though the British ambassador in St. Petersburg acknowledged that they would probably not have embraced the opportunity.

Since 1867, the spotlight has been turned on Alaska on two occasions, during the gold rush of the 1890's, when the sourdough rather than the *promyshlennik* occupied the centre of the stage, and during the war in the Pacific when the Aleutians and Alaska became, after December 7th, 1941, an outpost for the defence of America. But besides describing these episodes in detail, Dr. Tompkins traces the, often unspectacular, political and economic development of the country.

Dr. Tompkins is to be commended for his interesting and informative book on a subject many aspects of which have hitherto been obscure. It is provided with sketch maps, attractive illustrations, and a complete bibliography.

R. W. COLLINS.

J. A. Allan and J. O. G. Sanderson, **Geology of Red Deer and Rosebud Sheets** (Research Council of Alberta. Report No. 13).

In 1917 the reviewer first crossed the area of the Red Deer and Rosebud Sheets as scullion to the senior author of this report. The trip was by river boat from Red Deer via the river of the same name and was thus confined to the valley of the stream. Because of the menial tasks of the occasion, and the perhaps immature perceptive ability of the scullion—at that time—little was learned of the geology of the area or the scenic beauty at many places. At this time the junior author had not entered the sanctum of the most holy of all professional sciences, but was perhaps chasing the ancestors of one of our rationed commodities and improving the dexterity of his lariat.

The senior author realized the error of judgment in selecting me as a scullion and did not

repeat the error in subsequent years. Consequently he has been spared in health to assist in the compilation of Report 13, some twenty-eight years later.

In 1920, Dr. Allan planted the scullion (Rutherford) and the junior author (Dr. Sanderson, familiarly known to a host of alumni as "Pete," which name incidentally is not included in his triumvirate of Christian initials, J. O. G.) at Drumheller in the valley of the Red Deer river. The direction was, "Traverse ye the valleys and hillsides, prepare ye a map and correlate the coal seams, and prepare sections and profiles. Fret not that the days of automotive transportation have not come unto field geologists. I will visit thee at intervals and assist thee in trials and troubles." This chapter ended with

the publication of Report No. 4, on the "Geology of the Drumheller Coal Field," by Allan.

In 1924 Sanderson (B.Sc. '23, M.Sc. '24) was assigned the task of extending the observations in this region to cover the two sectional sheets designated in the title of Report 13. From then on for twenty years, Allan, Sanderson, and Rutherford visited many parts of this area at numerous times, sometimes in pairs; but not until 1944 did all three meet together and examine a few critical spots, satisfactorily disagreeing on interpretations, as is the custom when three geologists get together.

Report 13 has appeared after some delay, perhaps because of an inherent stigma in the number assigned it in its pre-natal days. More specifically, some delay was due to the fact that Sanderson wished to extend his interpretations beyond the confines of the specific area and verify some of the more significant conclusions as to their original aspects which are set forth in Part Two of the report. This delay transcended the normal period of application of monetary appropriation for the report, and a period followed in which such support was not readily available.

The authors have had a somewhat difficult task in preparing this report after the lapse of some years, during which new data and interpretations have been accumulated, but these have caused no major changes in concept of the more important findings.

To some, a geological report such as this, might appear as "just another report on another area," but this is a different area in many respects. Usually the geologist complains that lack of exposed data prevents him from arriving at definite conclusions. In this case there is so much exposed in the extensive badland areas that the worker finds it hard to assimilate, integrate, and interpret all the data available and in a sense is confused and amazed with it all.

The report is in two parts. The first is by the joint authors and deals with the "General Geology and Economic Geology." It comprises about fifty pages with numerous illustrations. Part Two is by Sanderson and deals with the "Historical Geology and Sedimentation." Both parts contain a valuable amount of tabulated and correlated details which through time will serve as reference material for others working in this area and other areas adjacent. It is not the purpose of this review to dwell on such detail which obviously is essential to a report of this nature, but there are some major contributions to our geological knowledge of Alberta which arose from the study of this area. These are more fully described in this contribution

than in the brief summary announcements at earlier dates. The discovery of the disconformable relation between the Paskapoo (Paleocene) and the Edmonton (Cretaceous) strata was an important result of this work, not only to this area, but to other areas contiguous.

To the reviewer, the more important discovery was the occurrence of a volcanic tuff bed in the Edmonton formation. This is a significant event in the geological history at its time of accumulation, and the early announcements of its discovery stimulated search for similar rocks in other areas. When I look through the storage trays at the samples of these beds collected by Sanderson, the labels say "Limestone?—Sanderson 1924." In the same year Rutherford collected samples many miles to the west in the foothills and labelled them "Limestone?" Sanderson was the first to determine later in the laboratory that both these rocks were volcanic tuffs and not limestones. Rutherford, because of his access to specimens, has had a chance to replace his labels; Sanderson is more unfortunate in this respect. The broad regional significance of the volcanic unit in correlation far beyond the confines of this area, even into Saskatchewan, is discussed in Part Two. I have dealt at some length with this one aspect of the report, since in subsequent years I have found this tuff the most useful guide in remapping parts of this area in some detail for governmental and private interests.

To date, coal is the main mineral resource of this area, and the studies of these deposits form an important contribution to the character of such deposits here and elsewhere where they are often more concealed.

Joint authorship is difficult in any time, but when the authors are in separate cities and work in somewhat different branches of the profession, the difficulty of compiling a report is increased. Thus some paragraphs and sections might appear slightly like the "voice of Esau and the hand of Jacob," but this is a minor matter.

The data, figures, illustrations, maps, etc., had been accumulated over a period of years. Why should they continue to be entombed in storage cupboards? Better that they be entombed, even if a little late; hence Report 13. The authors have placed their interpretations on record. Now we can start to disagree all over again.

In general, the report is well arranged and amply embellished with plates, figures, and illustrations. No doubt several alumni have already received copies; and others, especially those familiar with the general area, will be glad to know that it is still available in limited numbers.

R. L. RUTHERFORD, '19.

University Press Releases

September 28, 1945.

Proposed Department of Sociology

The Board of Governors has from time to time in recent years received representations from various bodies urging the establishment of a chair of Co-operation in the University. At present the subject of Co-operation is treated in various courses in the Department of Political Economy, where it shares interest and attention with other subjects in the field of economics, such as trade and transportation, money and banking, labour relations, taxation, etc.

Important as Co-operation is, the Board has hesitated to establish a chair in any restricted subject, feeling it sounder to follow the traditional policy of establishing professorships only in relatively broad fields of learning. Students in a narrow field are necessarily restricted in the number of openings which they are qualified to fill after graduation.

At its last consideration of this matter, the Board decided there was real need for a university department which would specialize in social organizations and social relations of all kinds, including of course Co-operation. The name "sociology" was suggested, using it not in the restricted sense of social welfare study which has become rather common, but in its original meaning as the science of living together. In this department there would be brought together government (or political science), law, and economics, treated as integrated factors in organized society. The Board proposes to give further consideration to the practicability of establishing such a department in the near future.

October 11, 1945.

The Executive Committee of the Board of Governors held its regular monthly meeting on Tuesday, October 9, under the chairmanship of Mr Justice H. H. Parlee. There were also present Dr R. Newton, Dr. G. Fred McNally, Mr A. West, and Mr. Clem King.

The crisis in accommodation that faces the University occupied the main attention of the meeting. There are now in attendance on the University Campus 2,527 full-time undergraduate students, in addition to 86 graduate students. The latter number will be increased, as registration in the School of Graduate Studies is not yet complete. These numbers are over 700 greater than the number of students who registered in September, 1939, the previous peak year of the University. The difference is wholly made up by the student veterans who registered this September. Civilian student registration alone has therefore jumped to a figure equal to the previous peak, and this notwithstanding that some 150 were refused admission to this session for lack of room.

No fully qualified student veteran has been refused admission, but the foregoing number of

civilian students, most of whom had just completed their high school matriculation, were asked to postpone their registration for a year. It was explained to them that the student veterans who were displacing them had had to wait anything up to five or six years before entering the University.

The President reported that the transfer of the Faculty of Education to the former Normal School building, the taking over temporarily of the former University High School building, the enlargement of the former I.T.S. canteen and its conversion to class-room purposes, and the use of the former I.T.S. drill hall as a temporary gymnasium, had made it possible to accommodate the unprecedented number of students now in attendance. He pointed out, however, that it will be impossible to accommodate the special session for student veterans planned to open in January unless further temporary accommodation can be found. Moreover, next September students moving forward from the session now under way and from the special session to run from January to August will come together in the second year, thus creating a demand for classroom and laboratory facilities well beyond those now available in the University. It seems altogether probable too that first-year registration will again be abnormally high next September, because of the need for accommodating those who have been postponed this year for lack of room. This situation constitutes a crisis which the Executive decided must be discussed with the Premier of the Province at the earliest possible date.

To help meet the present emergency in teaching staff, Dr. J. M. MacEachran and Professor Norman C. Pitcher, who retired at the end of the last session, have resumed part-time duties in the Departments of Philosophy and Mining Engineering respectively. For the same reason, Mrs K. E. B. Preston, formerly Miss Foskett, is returning temporarily to her duties as Lecturer in Physical Education for Women. These reappointments were confirmed by the Executive.

Since it has not yet been possible to fill the two vacancies in the Faculty of Law, the Executive approved the appointment of Mr. Wilbur F. Bowker as Associate Professor of Law for the present session. Captain Bowker has just secured his discharge from Headquarters staff of the Department of National Defence, Ottawa, and his services have kindly been loaned to the University by the firm of Milner, Steer, Dyde, Martland, Poirier, and Bowker. Other members of that firm and members of other legal firms in the city will continue to give part-time assistance to this Faculty. Professor George Steer will continue as Acting Dean of Law.

The Executive accepted with regret the resignation of Dr. W. J. McAlister, Superintendent of the Oliver Mental Institute, who has been Instructor in Mental Hygiene in the Faculty of

Medicine for many years. As an expression of appreciation he was appointed Honorary Instructor in Mental Hygiene. To succeed him in the active post, Dr. A. R. Schrag was appointed.

Dr. J. A. Romeyn, on his return from war service, was reinstated in the Faculty of Medicine with the rank of Associate Professor of Bacteriology.

The following appointments were approved, the unusually large number being occasioned by the continued necessity of strengthening the staff to cope with the enlarged student body: Dr. H. G. Skinner, Assistant Professor of Physiology and Pharmacology for the session 1945-46; Dr. M. E. Geissinger, Infirmary Physician and Sessional Instructor in Clinical Surgery; Dr. E. Newland Tredger, Lecturer in Pathology and Assistant in the Department of Pathology; Dr. G. I. Bell, Sessional Instructor in Clinical Medicine; Dr. M. Weinlos, Sessional Instructor in Surgery; Dr. D. B. Menzies, Sessional Instructor in Hygiene; Mrs. Barbara Eben, Sessional Instructor in the Three-Month Advanced Course in Practical Obstetrics; Mrs. Helen Morrison, Infirmary Assistant Nurse; B. Y. Card, Sessional Instructor in Physics; G. F. Dalsin, Sessional Instructor in Mathematics; C. D. Gordon, Sessional Instructor in Classics; J. G. Knudsen, Sessional Instructor in Chemistry; J. C. Nichol, Sessional Instructor in Chemistry; W. G. Skinner, Sessional Instructor in Accounting; E. K. Cumming, Sessional Instructor in Mechanical Engineering; J. L. Simpson, Sessional Instructor in Civil Engineering; S. R. Sinclair, Sessional Instructor in Civil Engineering.

Promotions approved included the advancement of Dr. Gordon C. Gray from Associate Professor to Clinical Professor of Surgery, and Dr. J. Calder from Instructor to Lecturer in Pediatrics.

The Executive accepted gratefully a grant of \$720 from the National Research Council for work in the Department of Biochemistry, and a set of nine files of Shakespearean literature donated to the Library under the will of the late Mr. T. M. Wears.

The Executive approved the appointment of a War Memorial Committee, with the following membership: Dr. J. M. MacEachran, Chairman; Mr. Justice H. J. Macdonald, President of the Alumni Association; Professor Reymes-King; Mr. Ron Helmer, President of the Students' Union; Mr. Kenneth Crockett, President of CURMA; Mr. G. B. Taylor, Secretary. This Committee will plan a special service rededicating the Memorial Organ so that future Remembrance Day observances may have equal reference to the University men and women who died in both wars. The Committee has also been invited to make any suggestions it desires concerning further steps that should be taken to commemorate the men who fell in the Second Great War.

Approval was given to a suggestion by the President that preparations be made for publishing a war history of the University.

October 23, 1945.

The Senate of the University of Alberta held its regular fall meeting at the University on Friday, October 19, under the chairmanship of Mr. Justice Frank Ford, Chancellor. Statutory members present were: Mr. Justice Parlee, Chairman of the Board of Governors; Dr. R. Newton, President; Dr. A. D. Miller, Principal of St. Stephen's College, Brother Prudent, Rector of St. Joseph's College; Bishop Barfoot, Rector of St. Aidan's College, Mr. James Fowler, Principal of the Provincial Institute of Technology and Art; Mr. J. H. Garden, Principal of Mount Royal College; Mr. Justice Hugh John Macdonald, President of the Alumni Association, Dr. W. H. Swift, Vice-President of the Alumni Association; Dr. M. E. LaZerte, representing the Deans' Council, Dr. A. W. Downs and Professor E. H. Strickland, representing the General Faculty Council, and Mr. Donald Cameron, Director of Extension. Appointed members present were: Mr. S. G. Porter, Calgary, representing Agriculture; Mr. H. A. Howard, Calgary, representing Business; Mr. R. T. Alderman, Calgary, representing Labour; Mr. F. G. Buchanan, Calgary, representing Public Education; Mr. G. C. Paterson, Lethbridge, representing Organizations devoted to Social and Cultural Welfare; Mr. H. E. Spencer, Egerton, representing Agriculture and Public Education; Mr. C. L. King, Executive Assistant to the President; and Mr. A. E. Ottewell, Registrar.

The chief order of business was the reception and consideration of reports of the standing committees. The President reported for the Committee on Extension that the Director of Extension was now an ex officio member of every department of the University, and that each department had accepted responsibility for initiating proposals for appropriate external contacts. The Extension Department would then be responsible for assisting in carrying out these proposals, as well as conducting various special activities of its own.

Seven series of talks over Radio Station CKUA have been organized by staff members. These are entitled: The Chimney Corner, Behind the Headlines, World of Science, Education for Tomorrow, Alberta Stories, Curtain Going Up, and Books at Random. All these fall at the convenient evening hours of 7:45 and 8:45, Monday to Friday inclusive. A little later the University will be taking responsibility for two hours of good music daily, which will include a number of organ recitals by Professor Reymes-King. Provision has also been made for various student features.

Further with regard to extension activities, Mr. Donald Cameron reported a number of successful Community Life Conferences held during the summer season. The Banff School of Fine Arts continues to grow steadily, attendance at the thirteenth annual session held last August having totalled 427, with students distributed among art, music, drama, weaving, leather work, short story writing, and oral French. The provision of better living and



Mrs. Sitting Eagle, by Kay Ball



Mount Rundle, by H. B. Gibson



Wind, by Bob Carrier

eating accommodation for students in attendance at this school is now receiving active consideration.

The Committee on Fraternities reported that with the growth in size of the student body it has become possible to make a much desired change in the regulations with regard to the time of pledging new members. Hitherto Freshmen have been canvassed almost immediately upon their arrival at the University and taken into fraternity houses in the second term. In future no active canvassing will be permitted until the second term, and pledges will not enter fraternity houses until the beginning of their second year in the University. This new plan will give Freshmen a chance to settle down to work more promptly and to become better acquainted with university life before making the important decision as to whether or not to join a fraternity. It will also give fraternity members more opportunity to get acquainted with prospective new members before taking them in. Since there are already one of two other student residential clubs on the Campus and more may be formed, the Senate decided to extend the jurisdiction of the Committee on Fraternities to cover all such organizations. This will ensure that all carry on under similar regulations.

The Committee on Student Affairs reported that the Students' Union of last year, under the presidency of Mr. Alf Harper, had had a very successful session and that all business appeared to have been satisfactorily conducted.

There were a number of submissions from outside bodies or persons. Mr. H. E. Nichols presented, on behalf of the Alberta Farmers' Union, a brief commending the Governors of the University for their desire to establish a Chair of Sociology, and urging that the incumbent of that Chair, when he is appointed, should make a careful study of the fundamental bases of society in order to contribute, if possible, through his teaching to an improvement of the present unsatisfactory state of affairs all over the world. The Senate decided to refer this submission for study to a committee now making a general review of the curriculum of the University.

Mr. H. G. Hearn submitted an interesting memorandum bearing to some extent on the same topic, in which he advocated the introduction of Bible study in the elementary schools, not as a religious exercise but simply to make pupils acquainted with the Bible, both as good literature and as a source of wisdom which might be expected to influence their later citizenship. This view was commended by various members of the Senate, and it was decided to refer the memorandum to the Director of Curriculum of the Provincial Department of Education with the recommendation that it receive sympathetic consideration.

A third submission was a protest from the parent of one of the students whose admission to the University has been deferred a year because of lack of accommodation. It was pointed out that many parents had made similar

protests, which were quite understandable from their point of view, but that all that could be said to them was that the student veterans displacing temporarily these civilian students had waited anything up to five or six years for an opportunity to enter University, and that since there was not room for all, it seemed not unfair to ask some new matriculants to postpone their entry for one year.

This submission precipitated a discussion of the accommodation crisis in the University. The President outlined the steps which had been taken to make available additional temporary space this year, and stated that the Governors were pressing upon the Provincial Government the urgency of proceeding with a permanent building programme at once. The only alternative appeared to be to continue to set rigid quotas upon the number of students admitted each year.

A special meeting of the statutory members was held during the lunch hour, at which it was decided unanimously to reappoint for a further term of three years the appointed members whose first terms would lapse on October 23.

October 28, 1945.

Edward Herbert Boomer

Dr. Edward Herbert Boomer, Professor of Chemical Engineering, made a unique contribution to the life and work of the University of Alberta. Starting in a junior position some twenty years ago, as a young graduate of British Columbia and McGill universities, he rapidly built up a reputation as a scientist and chemical engineer which placed him in the very front rank of his profession. Under his leadership, chemical engineering grew into one of the most popular branches of study in the University. Widespread recognition naturally brought him many attractive offers to go elsewhere, especially to important industrial posts, but loyalty to his students and to scientific research always held him to his post in this University. The war laid heavy responsibilities upon him, both in directing research in his own laboratory and in technical advisory work to Allied War Supplies, the Dominion Government corporation which established munition plants throughout the country. During the last two years, his part-time work as Chairman of the Natural Gas Conservation Board earned him the appreciation of both Government authorities and operators. Last spring he was one of the first Canadian scientists to enter Germany in the wake of the retreating German army, in search of technical information. Distinguished alike for competence and willingness, Dr. Boomer was charged with many tasks and spent himself unreservedly in his country's service. His death leaves an irreparable gap in the ranks of the University staff.

November 16, 1945.

The Executive Committee of the Board of Governors held its regular monthly meeting on Tuesday, November 13. There were present:

Mr. Justice Parlee, Chairman, Dr. G. F. McNally, Dr. R. Newton, Mr. Clem King, and Mr. A. West, Secretary.

On the report of the President that the advance registration of student veterans for the special session beginning early in January was now nearing 600, and Mr. King's report that he had been unable to find any temporary accommodation in Edmonton which the War Assets Corporation was willing to release to the University, it was agreed to proceed at once with a new temporary building on the University Campus. This decision was made reluctantly, because all members regretted putting further money into temporary buildings when we should be proceeding with our permanent building programme.

Acting on a recommendation of Dr. MacEachran, Chairman of the University War Memorial Committee, appointed by the Board at an earlier meeting, it was agreed to add to that Committee Dr. R. K. Gordon to represent the academic staff and Mr. A. West to represent the non-academic staff.

The President reported that a substantial file had been collected of documents recording the war activities of the University, including enlistments, war research, accelerated courses, special courses for Naval and Air Force personnel, and war service units on the Campus. It was agreed to appoint Mr. Lewis Thomas, of the Department of History, to classify and supplement these records and to prepare a war history of the University.

The following appointments were approved in a further effort to cope with the increased registration: Mr. A. Roshko, to be Sessional Instructor in Mathematics; Miss Sybil Fratkan, to be Session Instructor in Chemistry; Mrs. R. G. Brewer, to be Demonstrator in Household Economics for the second term of the current session;

and Mr. R. Hanson, to be Instructor in the Diploma Course in Dairying, which was organized in co-operation with Canadian Vocational Training.

November 23, 1945.

Proposed Temporary Classroom Accommodation

With another seven to eight hundred student veterans in prospect for the session opening in January, and the probability of at least a thousand freshmen entering next fall, it has been decided that a temporary building devoted to lecture rooms must be erected at once. The permanent buildings projected cannot be ready in time to meet immediate needs.

The "temporary" lecture accommodation under consideration will be a building 175 feet long and 54 feet wide, two stories in height, located probably on the lower level west and north of the North Laboratory. There will be twelve lecture rooms in the building, varying in capacity from 40 to 300 students per room. Several offices will also be provided to accommodate the additional instructors that will be engaged by the University.

It is hoped that construction may begin in the first week of December and that the building can be rushed to completion.

So far as is practical, native materials will be used in the construction, in an effort to avoid the inevitable delays which are encountered in securing building supplies.

It is anticipated that the total cost of the building and furnishings and equipment will be in the neighborhood of \$90,000. The Provincial Government has undertaken to assist in the financing of the project to the extent of \$50,000 in order to help the University in providing accommodation for the large number of returned veterans seeking university education.

Editor's Note: The project of building this temporary structure has been abandoned. Buildings at the U.S. airport have become available. But as the discussion of a temporary building is part of the history of our time, it is here printed without apology.



Abandon Hope All Ye That Enter Here

By FRED A SMITH MUDIMAN

Some of the men students aver that carved over the main entrance of Pembina Hall the following warning should appear: "Abandon hope all ye that enter here." For once again Pembina is a part of the Campus. It was regrettable that women students during war years had to be deprived of this valuable part of University training. Pembina Hall is more than a building, or an institution; it is a way of life.

There is no exact duplicate in human relationships for the special feeling of friendship among those who have shared life in Residence together, and it grows stronger with the years. To those who lived there during the happy half of the 'twenties, come pleasant memories of laughter, song, and gay interludes in serious study.

Dean of Women in the 'twenties was Miss Florence Dodd, who held that position from 1920 to 1943. She retired for health reasons and is now residing at the Glenshiel Hotel, Victoria. Her outstanding characteristic was kindness, and those who were fortunate enough to live with her in residence will remember her with affectionate regard. She had a remarkable memory, and of all the hundreds of women students whom she met in her years at the University, never forgot a face or a name, and would even recall details of families and friends. She played no favorites, and those who worked with her on committees came to rely on her mature judgment. She was more than generous in loaning even prized possessions for plays or teas; and, in spite of heavy social obligations, always had time for solving worrrying problems. It must have been an ordeal to stand up before a hundred pairs of critical eyes at her after-

dinner conferences when there was a discussion of matters of policy, coming events, house rules, fine points of conduct, but she never faltered in her duty. And the girls also admired her because she never "snooped." When difficulties arose, she dealt with them, but she did not go about looking for trouble.

One fine Spring evening she ran smack into it. Briskly rounding the corner of Pembina, she found a young man lurking in the shadows by a side door. She spoke to him, and they engaged in a desultory conversation.

All at once a light sprang up on the third floor landing, then on the second, and on the first. Blithely descending the stairway came a Freshette, a Freshette under C.B. punishment and temporarily in disgrace. There was no way to warn her. She descended happily, opened the door, called to her swain, and found him there—with the Dean.

Down in the dining-room Mary supervised the vagaries of tea and toast with unruffled calm. Hot cakes on Tuesday mornings, tombstone pudding on dreary days, Friday fish, chicken every Sunday.

Presiding over all was Jimmy the Janitor, who ruled with an iron hand the ninety-some girls, who thought up ninety-some different ways to plague him.

Door maids came and went, one long remembered for her crowning glory that looked exactly like an O-Cedar mop. She also had a charming custom in announcing callers. Standing at the head of a corridor she would call a girl's name and shout, "Yer feller's here." Once an out-of-town fiance appeared, and she varied her phrase and called, "There's a man here ter see yer." A helpful friend popped her

head out of a door and asked, "What does he look like? Is he handsome?" The maid hesitated, then shook her head and said, "No, but it's the one that allers comes."

Telephone service in the 'twenties was awkward. One phone for ninety girls and three stories! When student nurses were quartered in the basement rooms, and given a phone, it eased out-going calls, and also caused some confusion.

One year at mid-term, when spirits and funds were low, a practical-minded young man, manager of a biscuit factory, sent the lady of his heart a case of chocolate cookies. Wise in the ways of the world, and evaluating her sudden popularity for what it was worth, she zealously guarded her treasure. But the basement telephone was her undoing. Called to take a call at the office on the first floor, she carried on a long and puzzling conversation with an unrecognized, but vaguely familiar voice, which really came to her from the basement phone. Returning to her room, she discovered all but the lower layer of chocolate cookies had completely disappeared.

Of course she should have locked her door, but doors were never locked in Pembina in the 'twenties. Else, however could your friends borrow your clothes, and conversely, you borrow theirs? One girl was waiting for friends on the corner down town, by the Hudson Bay Store, when the high level street-car stopped and off stepped her precious new hat. From October to May everyone's wardrobe became part of a vast stock pile.

The hustle and bustle before a dance, the jam session after, were half the fun of going out. Everyone was helpful too in the matter of make-up, and encouraged one fair maiden to experiment with the new hair rinses just coming on the market. The mixture was prepared and the process begun. The fluid resembled tomato soup, and soon turned the venturesome

one's hair a delicate peach shade. Unfortunately at this stage the plug in the wash basin loosened, and the "soup" went down the sink.

Few would be brave enough to appear at a dance with pink hair, so a frantic phone call was wafted across to Athabaska Hall and the young escort informed he simply had to rustle some rinse. Steen's could not supply it; he would have to go down town. As it was now near closing time, he set off across the campus at a dog trot, admonished by shrieking voices to "Hurry" and "Remember, Golden Glow Hair Rinse." The word spread and the atmosphere grew tense—would he get the rinse?—would she stand the strain?—would they get to the dance? But he did, and she did, and they did.

Living in this pleasant, and truly Canadian, atmosphere could not help but leave its mark on the girls. Working and studying *together* gave a better outlook on subjects. Constructive criticism is most valuable in creative effort, and the comparing of results and ideas on scientific subjects is a necessary method of approach to those matters. While Pembina, to date, has produced no Pearl Buck or Marie Curie, it has turned out some creditable students—and many good wives and mothers.

One fine Winter evening some Pembinites decided on a moonlight hike to the river bottom, and hastily gathered up warm clothing and materials for a campfire, and a picnic lunch. A tea-kettle was filled and one girl delegated to ensure its safe arrival. The party set off and soon reached a spot which promised fairly easy descent. Each, in turn, took off and landed—all but she with the tea-kettle. She stepped, slipped, spilled, and finally sat down, kettle held aloft, and let gravity take over.

Returning from an over-town function late one evening, two Seniors, one the Pre-

sident of the House Committee, sank exhausted on a couch in the large living-room and removed their shoes. Relaxed, they talked over the evening's festivities and were startled when the front door slammed and in breezed two rosy-cheeked Freshettes. At that time there was a curfew on First Year girls—and the hour was late. The Freshettes were startled too and quite convinced that the older girls were waiting there for them. One said, "Good evening, it's nice out tonight." The other was speechless. The President of the House Committee managed to control her voice and said severely, "Of course you realize this will have to be reported." The Freshettes scuttled off to bed, and the Seniors collapsed on the chesterfield.

Contact with other girls from different parts of the West, girls with different backgrounds, ideas, points of view, walks of life, had a broadening influence. More than was in books was learned from the after-dinner conversations along each corridor. And there were, too, the after-dinner talks given by the Dean.

Life in Residence, wholesomely satisfied the gregarious instinct of the age when it is so important to do things together, in groups, even if it is only window shopping. One girl came back from town and announced she had saved a lot of money. She had that afternoon looked at clothes, furniture, china, linens, and hadn't bought a thing!

Then there were the trips across the bridge to see plays, concerts, Grand Opera, Symphony Orchestras. Top row seats at the New Empire, but a crowd together, so much more fun together—Rachmaninoff's Recital—D'Oyly Carte Light Opera—Sir John Martin Harvey.

Plays, concerts, evening entertainments in Convocation Hall meant something quite different, for here you, or your friends, were involved. There was much searching of the "stock pile" for appropriate costumes and stage properties, discouraging rehearsals, tension as the curtain went up. One amateur performance called for the sipping of wine by the cast. This was obtained, or a reasonable facsimile of same, but glasses were a problem. However, a kind lady came forth with the offer of her cherished goblets. They were given very careful care until the night of the production. The play went along smoothly, the wine was sipped, the glasses safely set down. Then one of the cast nervously turned about and away went a glass. Fascinated, the owner, the Property Woman, the cast, watched its progress to the floor, across the stage, to the edge. Members of the orchestra also had their eyes glued to the tumbling tumbler, knowing its value, and vowing that henceforth *all* stage properties should be "Courtesy of Fred Woolworth." At the critical moment the pianist arose from his place and caught the glass in mid-air. At the after-theatre party that night, *he* was the hero.

Sadness tinged the Senior Year, for soon good times would be over and the serious business of living begin. More advanced study was undertaken and more responsibilities. Final examinations over, there was a round of entertainment for the graduating class. The girls arranged a Tea for the Faculty—and lost four silver teaspoons!

Convocation—the tea for friends—the last dance—packing—saying Good-bye—Jimmy's "So you're hittin' the trail"—leaving Residence—seventeen or seventy, still at heart a Pembinites.

Alumni Notes

Although this is being written early in December, 1945, it will not be read by you until January, 1946. Much therefore as I should like to wish you all a Merry Christmas, it would be somewhat belated; however, it should not be too late to say something that's had to wait a number of years: "A Happy and Peaceful New Year to each one of Ye."

1912-1930

We (and by that I mean the staff of the Registrar's Office in particular) were dismayed to learn in late October of the serious illness of our chief, A. E. Ottewell '12, '14. He has been a patient in the University Hospital, but, I am glad to say, has returned to his home. I am sure he would like to hear from his contemporaries. . . . In point of time, Margaret Fairley '13 is the next for mention. In a very brief note this Toronto alumna expressed an interest in Professor Strickland's housing article (July, 1945) and gave her address 16 Hazelton Ave., Toronto 5. . . . Alas! the next seven years are news-less, much to my regret, so I come to 1920. Fred J. Batson, executive vice-president of the Kittinger Company, Buffalo, New York, provides a change of address for himself (1893 Elmwood Ave., Buffalo 7) and for his brother Jack '32, 301 North Drive, Buffalo 16. Just a little over a year ago Fred participated in the ceremony during which the Army-Navy "E" award was presented to his company "in recognition of exceptional performance on the production front." I am sorry to record the death in Vancouver last February of Mrs. G. W. Wright (nee Cecilia Barbara Watson) '20. . . . A visitor in October was Harold Gaetz, Pharmacy '22. Just discharged from long service overseas, Hal expects to return to England. . . . Another long service man just retired from the RCAF is Dr. "Bill" Hanna '22, '23, who is now officer-in-charge of the Dominion Lab. of Plant Pathology at Winnipeg. He says, "Now that I have returned to the west, I shall look forward with pleasure to the prospect of seeing you." That pleasure will be mutual. . . . Bert Rudd '23, '25, '35, who can always be counted on as a staunch alumnus, writes from Lethbridge (652 11 St. S.) in part as follows: "I am again teaching in the Dept. of Social

Sciences in the Collegiate here after a year spent with the North American Life Insurance Co. in Vancouver. George Millar '40 is teaching (Chemistry) here, also Enid Parsons '40, '45." . . . "I have been with Personnel Selection since my enlistment in 1942 and am now in England," says Capt. Margaret Stanford '24 of the CWAC Depot Coy, 1 CGRU, C.A.O. . . . From the treasurer I learn that Dr. Alf Leahey '25, '27, a most loyal supporter of the Association, was a visitor in the west recently. His address is 16 Julian, Ottawa, Ontario. News of the Fromans, Darol '26, '27 and Ethel (Norris) '29 comes in a note from the latter headed Box 1663, Santa Fe, New Mexico, so you can guess what he's been doing! Ethel says, "Two and a half years ago we came to Los Alamos, and it has been quite an experience watching the town grow from nothing to 7,000. I have justified the years at U of A by being post pharmacist, but now that the emergency is over, am devoting my time to our two daughters" . . . Dr. J. A. Campbell '29 refers to a "sense of belonging even over the distance" which was engendered by **The New Trail** and the Chipmunk while on army service. He writes again from Box A, King's Park, N.Y. . . . "My family of three boys think it grand to have their father home again," says R. J. Milligan '30. Now district agriculturalist at Strathmore, Alberta, he had previously spent forty-nine months in the RCAF. During summer session I ran into A. B. Evenson '30, '42, who was teaching here. He and Mrs. Evenson (nee Marjorie Lundy '30) live at Cardston, where he is Superintendent of St. Mary's River School Division. . . . My last note in this section concerns the Petos; Dr. Frank '30 writes from 5887 Olympic St., Vancouver, but from November, 1945, until April, 1946, he will be residing at the Ozama Sugar Co., Ciudad Trujillo, Dominican Republic. Howard '37 is now employed by Burpee Ltd and lives at 718 North Third St., Montrose, Colorado.

I have the following cordial message from the secretary of our newest branch:

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us, I have been asked to send you a list of executive officers as follows:

President: Mabel Conibear '30, '32, 238 Douglas St., Phone G3074.
 Vice-President: G. H. Marr, Applied Science 1925, 1120 Topaz Ave., Phone B2771.
 Secretary: R. C. Blodgett '33, 2580 Bowker Ave., Phone E1287.
 Treasurer: Edna Patrick '39, 841 Broughton, Phone E1005
 Strength to your arms, Victorians!

1931-1937

In a letter headed "HQ, 'A' Group, CRU, England," Major W. P. Wagner '31 says: "Seems strange that the 'Chipmunk' was the first means of indicating to four of us here that we were all graduates of U of A or from Edmonton. I refer to Major Doug McIndoe '39, Major Buck Blair '42 (DAAG), SP at CRU, Major Bob Pell, C.O., No. 1 Cdn. Selection of Personnel Section A. We four Edmontonians wish to greet you and to say 'Merry Christmas'." . . . Another recipient of the Chipmunk is W/C A. N. Carscallen '31, Can. C 3066, RCAF HQ, India and S.E.A., who writes appreciatively and who hopes to be renewing old acquaintances on the campus before many months have passed. Here at the U we have had the pleasure recently of seeing and listening to a distinguished '31-er in the person of Dr. Gordon Patterson who has spent most of the war years "experting" in aeronautics in Australia. His discourses left this alumnus gasping. For the next while Gordon may be addressed Liaison Office Room 614, Dupont Circle Bldg., Washington 6, D.C. . . . Norman Jennejohn '32, '37 (Dentistry) writes from 303 Medical Arts Bldg., Nelson, B.C., as follows. "My sister Eleanor '32 who is teaching at the Colonel Walker School in Calgary lives at 62

New St. Quite often I meet old grads who are working for CMS at Trail, for example, R. S. Woodford '27 who went in for physics along with Don Sproule '28, '29 and Darol Froman '26, '27. I have also met Edward L. Jones '26, Bob Walton '28 (of the purchasing dept.), and his wife (nee Helen Higgs) '29. We have a new son (Nov. 21) which gives us a family of three boys." Mrs. Jennejohn was Helen Mc Bride '38. . . . Alma May Gubbins (nee Harries) '32 now resides in Arcade, N.Y., U.S.A. The **Edmonton Journal** in October carried an announcement of the birth of Mary Katherine Ada Gubbins on October 12. . . . Flight Officer Florence Stacey '33 who arrived in England a year ago was flown to Germany last June to observe methods of field cookery practised by the RCAF in the field. She has travelled extensively in England, Scotland, and Wales and "enjoyed every minute of it" . . . Back on the job in the Dept. of History is Lewis Thomas '34, '35, his wife was Muriel Massie, H.E.C. '34. . . . Ken Ford, also '34, is another returnee after nearly five years with the Engineers in England, North Africa, and North West Europe. Married last June to Evelyn Atkin '32, he is now assistant engineer with the Engineering and Surveys Branch, Dept. of Mines and Resources at Banff. . . . Representing 1935 is H. B. Rogers who teaches at Red Deer and who came in for a wee chat at the end of August. . . . Miss Patrick has recently had a most interesting letter from Marion Aikenhead '36, No. 7 Cdn. Gen. Hospital, C.A.O.F. Space restrictions prevent me from quoting, but I must not forget that she refers to another dietitian there in the person of Margaret Willox '42. . . . After serving on the Castle Class Corvette HMCS "Orangeville," Rodney Pike '36 is back on the job c/o Confederation Life Assurance Co., Edmonton. . . . A pleasant though hurried visit the other day with Ray Ure '37, '39 of the Dominion Experimental

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Station, Morden, Manitoba. He referred to John Walker '24, now superintendent Dominion Forest Nursery Station, Indian Head, Sask., and to Emil Andersen '41, '43, associate prof. of horticulture at the University of Manitoba. . . From their distinguished doctor father, I learned recently that Gurth O'Brien '37 and Hugh '37 were practising at Grande Prairie and Dawson Creek respectively. . . I now report a change of name for a 1937 alumna, Eleanor Gerwin. She is Mrs. W. B. Heady and resides at 4519 West Fifth Ave., Vancouver, B.C. . . Rev. Robert Tillman '37, '40 is in Geneva, Switzerland, where he is working for European Student Relief under the World Student Christian Federation. He has just completed a tour of Dutch universities. Mrs. Tillman lives at 4654 West Ninth Ave., Vancouver.

1938-1945

From the Brown University News Bureau, Providence, R.I., comes word that Jack Brown '38, also a graduate of McGill and Chicago, has been appointed assistant librarian of Brown University's John Hay Library. . . I was glad to see Bob Mewburn '39 recently after his return from a tour of Europe with the Royal Canadian Artillery. . . John Oberholtzer '39, '41 reports a change of address, namely, to 993 6 Ave. Verdun, Montreal 19, P.Q., and mentions seeing the following alumni: J. A. Morrison '40, '41, "Mac" Eloffson '41, Bob Brown '43 (?), Gordon Finlay '38, '39 (Ph D Cornell), Chipawa, Ontario, Mrs. W. Partin (nee Polly Piercey) '39, Weston, Ontario, Norman Legge '42, '43 (Ph D. McGill), A. W. Miller '35—in fact, he

says, "U of A'ers are all over the place." . . It is gratifying to quote this message from Rev. C. E. Rogers, 12954 120 St., Edmonton: "I have the pleasure to inform you that Bernard ('39) has at last cabled from Melbourne, Australia, that he is safe and fit, and expects to be on his way home shortly. (As a prisoner of the Japanese) He had been working in a coal mine and in a blacksmith's shop." . . Only reference to the class of 1940 in the material for these notes is to Capt. F. M. Brink, U.S. Army Medical Corps, who expressed appreciation for **The New Trail** from Shingburyang, Burma; however, he also gives the address, 98 Station Hospital, A.P.O. 689, c/o Postmaster, New York City. . . Herbert S. Wilson '41 recently discharged from the RCAF after service in Newfoundland and Yorkshire, hopes to take a year of PG work in petroleum engineering before returning to Imperial Oil. He writes from 330 13 St. S., Lethbridge. . . "I frequently meet U of A graduates in uniform as they stop off in the city," says Lieut. Bill Haddad, RCNVR, of Pacific Coast Naval HQ, Jericho Beach, Vancouver. . . Mona E. Fargey (nee Asselstine) '41 of Trail, B.C., who married a chemical engineer from UBC is now teaching again to relieve during the shortage. She too mentions the number of Alumni in Trail and the possibility of a branch there. Her address is 695 Tennyson Ave. May I suggest that the next home-comer to Edmonton be delegated to come in for a confab about how to start up? . . From 315 23 Ave W, Calgary, Jean Gill (nee Vallance) '42 writes in part as follows: "The

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death of Janet Irene Trotter '41 after injuries in an automobile accident, was a great shock to her many friends. While waiting for my RCAF husband to return, I spent a very pleasant summer in Montana doing work that required no thinking!" . Lieut G D Lavallee '42 thanks us "for providing a link between Tuck Shop days and our present existence. I bumped into Roger Flumerfelt in Amsterdam a few weeks back. Say hello to Bill Hudson [713 14 St, New Westminster, B.C.] for me and thank him for his very pleasant letter in the Chipmunk." Enid Meston '42 is now a continuity writer for station CJOC and likes it, she writes from 1230 5 Ave S, Lethbridge. . . "We shall probably be spending the winter here in Utrecht," says Capt R B Layton, 101 Cdn Army Edn Visual Aid Sec, CAO. "That should not prove much of a hardship. The people here are most friendly. It is not difficult to meet them—doctors, teachers, architects, painters, and businessmen. A surprising number speak English (I am sold on bi-lingualism)." . . J. F. Gonge '43, '44 writes from 2594 Wallace Crescent, Vancouver, to say that he is serving his articles with a law firm there, etc ("Etc" is very popular with the treasurer!). All that I can tell you about Elizabeth L. Empey '43 is that her address is T. Eaton Co., c/o Georgian Room, Toronto. "My new husband, Ray Kosloff, and I would welcome any old U of A acquaintances who chance to be in Chicago," says Jean Ball Kosloff '43 of 5731 Blackstone Ave, Chicago 37. "We are both studying here in economics, I in anthropology." . In September, 1945, Frances A. Clark '44, Ontario Reli-

gious Educ Council, Room 517, 299 Queen's St W, Toronto, was appointed director of children's work and church vacation schools for Ontario. . . Mrs. Joan Dewson (nee White), '44 remembers her Alma Mater even though she lives at 22 Hawthorn Grove, Wilmslow, Cheshire, England. . . Sole representative of 1945 is Bob Pulleyblank, 230 26 Ave. West, Calgary, who, hoping to go to the University of Michigan for his M.A. at the next session, is presently working in Calgary.

You may wonder what has happened to the Memorial Scholarship proposal. During the summer, Guthrie Sanford '20, past president of the Association, worked out a comprehensive "Memorial Loan Fund" plan which the Executive Committee approved unanimously. However, during the late autumn a War Memorial Committee was appointed by the Board of Governors, one of whose duties was to recommend an appropriate form for the University memorial. The Alumni proposal is now before this Committee. Other proposals are the erection of a gymnasium (sponsored by the Students' Union), and the establishment of a Peace Professorship (suggested by a group of students). The Canadian University Returned Men's Association (U of A branch) apparently favors the scholarship idea. All of the suggestions will be considered by the War memorial Committee in the new year.

With a renewal of the good wishes expressed earlier in these ramblings I bring them to a close. I am,

Most sincerely yours,

GEOFF.

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8:30		Campus Musical			
8:45	Varsity Varieties	Behind the Headlines	Education for Tomorrow	World of Science	Alberta Stories
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